This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images, please do not report the images to the Image Problem Mailbox.

PCT ORGANISATION MONDIALE DE LA PROPRIETE INTELLECTUELLE
Bureau international

DEMANDE INTERNATIONALE PUBLIEE EN VERTU DU TRAITE DE COOPERATION EN MATIERE DE BREVETS (PCT)

(51) Classification internationale des brevets ^{6} **:**
C12Q 1/68

A1

(11) Numéro de publication internationale: **WO 99/27132**

(43) Date de publication internationale: 3 juin 1999 (03.06.99)

(21) Numéro de la demande internationale: PCT/FR98/02501

(22) Date de dépôt international: 23 novembre 1998 (23.11.98)

(30) Données relatives à la priorité:
97/14669 21 novembre 1997 (21.11.97) FR

(71) Déposants *(pour tous les Etats désignés sauf US)*: CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS) [FR/FR]; 3, rue Michel-Ange, F-75794 Paris Cedex 16 (FR). INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE (INRA) [FR/FR]; 147, rue de l'Université, F-75341 Paris Cedex 07 (FR).

(72) Inventeurs; et
(75) Inventeurs/Déposants *(US seulement)*: ZOOROB, Rima [FR/FR]; 30, chemin de la Croix Biches, F-93160 Noisy-le-Grand (FR). AUFFRAY, Charles [FR/FR]; 6, rue du Clos Bourgoin, F-94370 Sucy-en-Brie (FR). CHAUSSEE, Anne-Marie [FR/FR]; L'Aître Barbier, F-37380 Saint Laurent en Gatines (FR).

(74) Mandataires: PEAUCELLE, Chantal etc.; Cabinet Armengaud Ainé, 3, avenue Bugeaud, F-75116 Paris (FR).

(81) Etats désignés: JP, US, brevet européen (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Publiée
Avec rapport de recherche internationale.
Avant l'expiration du délai prévu pour la modification des revendications, sera republiée si des modifications sont reçues.

(54) Title: REAGENTS AND METHODS FOR DETECTING GENES RELATED TO MAJOR HISTOCOMPATIBILITY COMPLEX OF DOMESTIC FOWL, SUCH AS CHICKEN

(54) Titre: REACTIFS ET METHODES POUR LA DETECTION DE GENES LIES AU COMPLEXE MAJEUR D'HISTOCOMPATIBILITE D'OISEAUX D'ELEVAGE, TELS QUE LE POULET

(57) Abstract

The invention concerns nucleic acid molecules for detecting the MHC genes involved in phenomena of resistance or proneness to the development of virus-induced tumours. The primers prepared from said molecules can be used in a method for genotyping domestic fowl, characterised in that it consists in: amplifying a nucleic acid sample derived from the animal under study using one or several pairs of primers capable of being specifically hybridised with the nucleic acid of a pleomorphic region of the Rfp-Y or B systems of the MHC of said fowl; detecting the resulting PCR products.

(57) Abrégé

L'invention vise des molécules d'acides nucléiques permettant de détecter ceux des gènes du CMH impliqués dans les phénomènes de résistance ou de susceptibilité au développement de tumeurs viro-induites. Les amorces élaborées à partir de ces molécules sont utilisables dans une méthode de génotypage d'oiseaux d'élevage et notamment du poulet, caractérisée en ce qu'elle comprend : l'amplification d'un échantillon d'acide nucléique provenant de l'animal à étudier à l'aide d'un ou de plusieurs couples d'amorces capables de s'hybrider spécifiquement avec l'acide nucléique d'une région polymorphe des systèmes Rfp-Y ou B du CMH desdits oiseaux et la détection des produits de PCR obtenus.

UNIQUEMENT A TITRE D'INFORMATION

Codes utilisés pour identifier les Etats parties au PCT, sur les pages de couverture des brochures publiant des demandes internationales en vertu du PCT.

AL	Albanie
AM	Arménie
AT	Autriche
AU	Australie
AZ	Azerbaïdjan
BA	Bosnie-Herzégovine
BB	Barbade
BE	Belgique
BF	Burkina Faso
BG	Bulgarie
BJ	Bénin
BR	Brésil
BY	Bélarus
CA	Canada
CF	République centrafricaine
CG	Congo
CH	Suisse
CI	Côte d'Ivoire
CM	Cameroun
CN	Chine
CU	Cuba
CZ	République tchèque
DE	Allemagne
DK	Danemark
EE	Estonie
ES	Espagne
FI	Finlande
FR	France
GA	Gabon
GB	Royaume-Uni
GE	Géorgie
GH	Ghana
GN	Guinée
GR	Grèce
HU	Hongrie
IE	Irlande
IL	Israël
IS	Islande
IT	Italie
JP	Japon
KE	Kenya
KG	Kirghizistan
KP	République populaire démocratique de Corée
KR	République de Corée
KZ	Kazakstan
LC	Sainte-Lucie
LI	Liechtenstein
LK	Sri Lanka
LR	Libéria
LS	Lesotho
LT	Lituanie
LU	Luxembourg
LV	Lettonie
MC	Monaco
MD	République de Moldova
MG	Madagascar
MK	Ex-République yougoslave de Macédoine
ML	Mali
MN	Mongolie
MR	Mauritanie
MW	Malawi
MX	Mexique
NE	Niger
NL	Pays-Bas
NO	Norvège
NZ	Nouvelle-Zélande
PL	Pologne
PT	Portugal
RO	Roumanie
RU	Fédération de Russie
SD	Soudan
SE	Suède
SG	Singapour
SI	Slovénie
SK	Slovaquie
SN	Sénégal
SZ	Swaziland
TD	Tchad
TG	Togo
TJ	Tadjikistan
TM	Turkménistan
TR	Turquie
TT	Trinité-et-Tobago
UA	Ukraine
UG	Ouganda
US	Etats-Unis d'Amérique
UZ	Ouzbékistan
VN	Viet Nam
YU	Yougoslavie
ZW	Zimbabwe

REACTIFS ET METHODES POUR LA DETECTION DE GENES LIES AU COMPLEXE MAJEUR D'HISTOCOMPATIBILITE D'OISEAUX D'ELEVAGE, TELS QUE LE POULET

L'invention a pour objet la détection de gènes liés au complexe majeur d'histocompatibilité (CMH) d'oiseaux d'élevage, tels que le poulet. A ce titre, elle concerne des molécules d'acides nucléiques permettant de détecter ceux des gènes du CMH impliqués dans les phénomènes de résistance ou de susceptibilité au développement de tumeurs viro-induites. L'invention concerne également les applications de ces molécules d'acides nucléiques, notamment pour le développement de tests de génotypage chez les oiseaux d'élevage, en particulier le poulet, et pour la sélection d'animaux d'intérêt.

Les maladies virales infectieuses sont redoutées des éleveurs en raison de leur caractère contagieux qui conduit à des pertes importantes d'animaux.

La vaccination a constitué une prophylaxie efficace jusqu'à l'émergence de souches hypervirulentes, rendant nécessaire l'identification des haplotypes résistants.

Diverses méthodes ont ainsi été proposées pour tenter de sélectionner ceux des animaux qui sont capables de résister à de telles pathologies et ceux qui sont au contraire susceptibles d'être affectés.

Les techniques les plus utilisées en routine sont basées sur des polymorphismes sérologiques ou de type RFLP. Toutefois, ces méthodes ne fournissent pas de connaissances précises sur le phénomène de résistance ou de susceptibilité à la maladie, en particulier par manque de caractère discriminant vis-à-vis des gènes des systèmes B ou Rfp-Y du CMH.

Les travaux des inventeurs sur le séquençage de gènes du CMH a montré la complexité génétique de cette région, ce qui les a conduits à prendre en compte un autre type de polymorphisme, à savoir basé sur la séquence de ces gènes et des régions apparentées, telles que celles de leurs promoteurs et des régions microsatellitaires. Les inventeurs ont ainsi mis au point des moyens pour disposer de molécules oligonucléotidiques hautement spécifiques des polymorphismes observés, permettant d'identifier les parties de gènes, et même les sites impliqués dans le contrôle de la résistance ou de la susceptibilité au développement de tumeurs.

Le caractère spécifique de ces molécules, vis-à-vis d'un gène donné de l'un des systèmes du CMH, en fait des outils discriminants particulièrement fiables pour identifier avec précision la capacité de résistance ou de susceptibilité du poulet étudié, ou d'autres oiseaux, à une infection virale, et pour étudier au niveau moléculaire les séquences du CMH impliquées.

L'invention a donc pour but de fournir des molécules d'acides nucléiques permettant de détecter spécifiquement, chez les oiseaux d'élevage et en particulier chez le poulet, les gènes liés au CMH impliqués dans les phénomènes de résistance ou de susceptibilité au développement de tumeurs viro-induites.

Elle vise également à fournir une méthode et un kit de détection de génotypes de mise en oeuvre aisée en routine.

Les molécules d'acides nucléiques de l'invention sont caractérisées en ce qu'il s'agit de molécules, isolées de leur environnement naturel, d'acides nucléiques de gènes codant pour des protéines impliquées dans le contrôle de la résistance ou de la susceptibilité au développement de tumeurs viro-induites chez les oiseaux d'élevage, telles que celles de la maladie de Marek chez le poulet, avec le cas échéant, les régions qui leur sont attachées, telles que celles du promoteur ou microsatellitaires. Le terme gène tel qu'utilisé dans la description et les revendications englobe ces régions.

Ces molécules d'acides nucléiques sont plus spécialement caractérisées en ce qu'elles présentent les séquences d'acides nucléiques de gènes du système B ou du système Rfp-Y du CMH des oiseaux d'élevage, à l'exception des séquences des gènes de classe II B-L, du gène 17.5, du gène 12.3 et du gène B-FIV de classe I, ou sont capables de s'apparier avec l'un des brins d'un gène capable de coder pour une protéine telle que définie ci-dessus dans des conditions faiblement stringentes.

L'appariement dans des conditions de faible stringence auquel il est fait référence ci-dessus est réalisé à température ambiante, dans un milieu 0,1 SSC, avec lavage à température ambiante.

Les gènes de classe II B-L sont décrits dans Immunogenetics 31:179-187, 1990 et Eur. J. Immunol, 1993, 23:1139-1145.

Le gène 17.5 appartient à la superfamille des gènes codant pour les lectines et le gène 12.3 à la famille des gènes codant pour des protéines liant la guanine (guanine nucleotide-binding protein). Ce gène est décrit dans Immunogenetics 39:221-229, 1994.

Le gène 12.3 est décrit dans P.N.A.S. USA, vol. 86, 4594-4598, juin 1989, Genetics.

Le gène B-FIV de classe I est décrit dans Immunogenetics 31:405-409, 1990.

L'invention vise notamment les molécules d'acides nucléiques répondant à ceux des enchaînements de l'un des gènes suivants :

. enchaînement du système Rfp-Y

B-FV (figure 1), B-F VI (figure 2) ;

. enchaînement du système B,

8.4 génomique (figure 3) ; B-F I (figure 4) ; C12.1 (figure 5) ; DM (figure 6) ; TAP1 (du début de l'exon 2 à l'extrémité 3') (figure 7) ; et TAP2G (figure 8), et autres gènes compris dans la figure 10 et suites 1 à 35.

L'étude des séquences d'acides nucléiques des molécules définies plus haut a permis de repérer avec précision les blocs de polymorphismes qui doivent être détectés pour établir un génotypage fiable et précis.

En comparant les séquences de ces blocs, provenant de différents gènes d'un même haplotype ou d'un même gène de différents haplotypes, les inventeurs ont pris en considération les enchaînements divergents et élaboré, pour chaque gène, des oligonucléotides complémentaires de ces enchaînements divergents.

On dispose ainsi d'amorces spécifiques et discriminantes vis-à-vis d'un gène donné du système B ou du système Rfp-Y.

L'invention vise tout spécialement les molécules d'oligonucléotides correspondant à ces enchaînements et comprenant une partie de la région polymorphe des systèmes du CMH du poulet ou autres oiseaux d'élevage.

On rappelle que la région polymorphe peut être dans le gène ou dans une région apparentée telle que les régions microsatellitaires ou celle du promoteur.

Selon un mode de réalisation de l'invention, les polymorphismes sont liés à la fonction des systèmes du CMH.

Il s'agit ainsi avantageusement de molécules correspondant à une partie d'un exon. On citera à titre d'exemple des molécules correspondant à l'exon 2 (domaine α 1) des gènes YF du poulet. Un couple d'amorces approprié est constitué par :

Y-F VI α 1 : GGCCCCGGGATGCCGCGGTTC
Y-F VI α 1, R : ATCCGCTCACCGCCCTGG

Selon un autre mode de réalisation de l'invention, les molécules oligonucléotidiques correspondent à une partie d'une région polymorphe qui n'est pas liée à la fonction des systèmes du CMH. Des régions préférées de ce type sont des microsatellites.

En considérant par exemple, le gène B-FI, des molécules d'oligonucléotides utilisables pour constituer des couples d'amorces correspondent aux enchaînements suivants :

B-FI : 5' CCA GCA GTC ACT GCA CAT AT 3'
B-FI, R : 5' AGG TGG AGT GCG CAA AGT T 3', et
12.1 : 5' ACA CGC AGC AGA ACT TGG TAA 3'
12.1 R : 5' GGA AGG AAG ACC TTG GAA 3'

Avec les molécules oligonucléotidiques définies ci-dessus et celles élaborées à partir de gènes connus, mais selon la démarche de l'invention, on dispose de jeux d'amorces hautement spécifiques, permettant de déterminer avec précision l'haplotype de l'animal à étudier et de détecter s'il est résistant au développement de tumeurs viro-induites, ou au contraire susceptible d'être affecté.

L'invention vise donc également une méthode de génotypage d'oiseaux d'élevage et notamment du poulet.

Cette méthode est caractérisée en ce qu'elle comprend

- l'amplification d'un échantillon d'acide nucléique provenant de l'animal à étudier à l'aide d'un ou de plusieurs couples d'amorces capables de s'hybrider spécifiquement avec l'acide nucléique d'une région polymorphe des systèmes Rfp-Y ou B du CMH desdits oiseaux, et

- la détection des produits de PCR obtenus.

Une simple comparaison des résultats obtenus avec un référentiel établi au préalable permet de déterminer rapidement l'haplotype de l'animal.

L'échantillon d'acide nucléique est constitué en particulier par de l'ADN génomique extrait de matériel biologique de l'animal à étudier ou par ce matériel même, en particulier par du sang de l'animal. Il peut s'agir en variante d'ADNc, d'ARN ou encore de PNA (polypeptides nucleic acids).

Les amorces sont élaborées à partir des molécules oligonucléotidiques définies ci-dessus et, d'une manière générale, de tout gène (et région apparentée) codant pour une protéine impliquée dans le contrôle de la résistance ou de la susceptibilité aux tumeurs viro-induites chez les oiseaux d'élevage et notamment de poulet, en particulier les gènes B-L de classe II, 17.5, 12.3 et B-FIV de classe I.

Il s'agit par exemple d'amorces de régions microsatellitaires permettant de détecter des haplotypes du complexe B, telles que celles élaborées à partir du gène B-FI, et évoquées ci-dessus, ou d'amorces permettant de détecter des haplotypes du système RFp-Y, et élaborées à partir du gène 17.5, comme le couple :

17.52 : CAG GAT CTG CAC TGG CCA ATA

17.5, R1 : GAA TGG CGG TGC TTC CGT GCC TGG

La détection des produits de PCR est effectuée selon les techniques classiques. Ces techniques comprennent le séquençage, l'électrophorèse, les hybridations avec analyse SSOP ou SSCP.

Cette technique sera avantageusement choisie selon la nature du polymorphisme impliqué. Ainsi, dans le cas de polymorphisme de type microsatellite, on détectera avec avantage les produits de PCR selon leur taille en ayant recours aux techniques d'électrophorèse.

Lorsque le polymorphisme ne concerne que quelques nucléotides, voire un seul nucléotide, on aura plus spécialement recours, aux fins de différenciation des haplotypes de produits de PCR, aux techniques d'hybridation (analyse sur membrane à l'aide de sondes spécifiques des séquences d'haplotypes, SSOP ou Sequence Specific Oligonucleotide Probe), de migration différentielle des échantillons dénaturés (SSCP ou Single Strand Conformational Polymorphism), ou de séquençage. De manière générale, cette dernière technique est préférée compte tenu de la simplicité de sa réalisation.

L'invention fournit ainsi une technique simple et rapide d'établissement du profil génétique d'un grand nombre d'animaux à étudier, ce qui permet de déterminer les haplotypes et de sélectionner ceux d'intérêt en vue d'un élevage.

De plus, chaque type de gène pouvant être discriminé en utilisant des amorces présentant la spécificité requise et son appartenance au système B ou Rfp-Y pouvant être établie, il est possible d'effectuer des études fondamentales plus complètes.

L'invention vise également un coffret ou trousse pour détecter le génotype du poulet ou autre oiseau d'élevage selon la méthode définie ci-dessus.

Ces coffrets ou trousses sont caractérisés en ce qu'ils comportent les réactifs nécessaires pour la réalisation d'au moins une PCR et du test de révélation.

En particulier, ils comportent les amorces pour la PCR, un témoin positif de la réaction, ainsi qu'une notice d'utilisation.

Les amorces se présentent sous forme lyophilisée ou en solution ou, selon le mode de détection, sur un support. Le support peut être, de manière classique, une plaque multipuits ou se présenter sous forme de puces à ADN.

L'invention vise en outre un système expérimental qui permet d'étudier la résistance au développement tumoral chez le poulet.

Il s'agit de lignées d'animaux qui ont été triées génétiquement sur leurs caractéristiques du CMH. En fonction de ces caractéristiques, les lignées sont soit résistantes, soit sensibles vis-à-vis des tumeurs induites par des virus, comme le virus de la maladie de Marek. Cette sélection génétique, qui s'est dans un premier temps effectuée sur des critères sérologiques, a été ensuite poursuivie sur la base de l'étude du polymorphisme des gènes du CMH. Il s'agit d'un matériel génétique qui est parfaitement défini d'un point moléculaire, et constitue un outil précieux pour l'étude du polymorphisme des séquences de type microsatellite. Ce matériel, ainsi que le produit du croisement entre certaines des lignées entre elles, a été utilisé pour déterminer les séquences microsatellites du CMH qui sont polymorphes et pour évaluer si ce polymorphisme peut être corrélé avec les données de typage déjà disponibles pour ces lignées.

D'autres caractéristiques et avantages de l'invention sont exposés dans les exemples qui suivent, dans lesquels il est fait référence à la figure 9 représentant une photo d'électrophorèse de produits de PCR illustrant le test de génotypage de l'invention. On rappelle que les figures 1 à 8, déjà évoquées ci-dessus, illustrent les séquences de gènes selon l'invention.

Exemple :

Etude d'haplotypes Rfp-Y du poulet à l'aide d'amorces microsatellitaires.

- amplification avec le Kit Expand™ High Fidelity PCR System

. Avec les amorces 17.5 R1/17.52

ADN génomique : 1 µg
Oligos prendre : 0,3 µM
dNTP : 8 µl
qsp H_2O 50 µl
On ajoute 50 µl de Mix 2 en mélangeant.

Mix 2 : 0,75 µl d'enzyme
10 µl TP10X avec $MgCl_2$
qsp H_2O 50 µl

Programme d'amplification :

30 Cycles

94°C	94°C	65°C	72°C	4°C
2'	30''	1'	1'	∞

. Avec B-FI/B-FI, R :

ADN génomique : 1 µg
Oligos prendre : 0,3 µM
dNTP : 8 µl
qsp H_2O 50 µl
et ajouter 50 µl de Mix 2 en mélangeant.

Programme d'amplification :

30 Cycles

94°C	94°C	60°C	72°C	4°C
2'	30''	1'	1'	∞

- révélation par électrophorèse sur gel d'agarose ou par séquençage.

Le test a été appliqué à 9 haplotypes de poulet, sélectionnés sérologiquement pour le complexe B. Il s'agit des haplotypes B4, B5, B7, B12, B13, B14, B15, B21 et d'un haplotype inconnu BX.

Plusieurs individus d'un même type ont été étudiés pour B12 (6 individus), B13 (3 individus), B14 (4 individus), B21 (4 individus) et un seul individu pour les autres haplotypes.

La figure 9 donne une photo d'électrophorèse sur gel d'agarose à 1 % des produits de PCR obtenus à l'issue de l'étape d'amplification.

Les pistes 1 et 27 correspondent aux marqueurs de taille et les pistes (2 à 25) aux produits de PCR des haplotypes suivants : piste 2 : B4 ; piste 4 : B5 ; piste 5 : B7 ; pistes 6 à 11 : B12 ; pistes 12, 13, 14 : B13 ; pistes 15, 16, 17, 18 : B14 ; piste 19 : B15 ; pistes 20, 21, 23, 24 ; B21 ; piste 25 : BX (absence de détection pour les pistes 3 et 22).

L'examen de cette figure montre que les individus qui ont l'haplotype B12 donnent une même bande et sont donc bien homogènes. La même observation s'applique aux individus B14. En revanche, avec B21, on constate que les profils sont différents, ce qui démontre l'inefficacité de l'approche sérologique. Compte-tenu de la position de la bande de BX, on détermine qu'il s'agit d'un haplotype B4.

L'application pratique de cette méthode revient à soumettre les individus naturellement résistants au protocole décrit ci-dessus en prenant en compte les deux systèmes Rfp-Y et B du CMH et à ne sélectionner parmi des animaux à tester que ceux dont le profil correspond à celui des animaux résistants.

L'invention fournit ainsi les moyens de vérifier l'homogénéité des animaux et d'effectuer des sélections rigoureuses en prenant en compte chaque système du CMH, et dans ces systèmes les gènes recherchés.

REVENDICATIONS

1/ Molécules d'acides nucléiques isolées de leur environnement naturel, de gènes codant pour des protéines impliquées dans le contrôle de la résistance ou de la susceptibilité au développement de tumeurs chez le poulet, telles que celles de la maladie de Marek, et de régions apparentées auxdits gènes caractérisées en ce qu'elles présentent les séquences d'acides nucléiques de gènes du système B ou du système Rfp-Y, correspondant au complexe majeur d'histocompatibilité des oiseaux d'élevage à l'exception des séquences des gènes de classe II B-L, du gène 17.5, du gène 12.3 et du gène B-FIV de classe I, ou sont capables de s'apparier avec l'un des brins d'un gène capable de coder pour une protéine telle que définie ci-dessus dans des conditions faiblement stringentes.

2/ Molécules d'acides nucléiques selon la revendication 1, caractérisées en ce qu'elles répondent à l'un des enchaînements suivants :

. enchaînement du système Rfp-Y

B-FV (figure 1), B-FVI (figure 2) ;

. enchaînement du système B,

8.4 génomique (figure 3) ; B-FI (figure 4) ; C121 (figure 5), DM (figure 6), TAP1 (du début de l'exon 2 à l'extrémité 3') (figure 7), et TAP2G (figure 8).

3/ Molécules d'acides nucléiques selon la revendication 1 ou 2, caractérisées en ce qu'elles correspondent à une partie des séquences définies dans les revendications 1 ou 2, cette partie étant spécifique et discriminante pour un gène donné des systèmes B et Rfp-Y.

4/ Molécules d'acides nucléiques selon la revendication 3, caractérisées en ce qu'il s'agit de molécules d'oligonucléotides correspondant à une partie de région polymorphe des systèmes du complexe majeur d'histocompatibilité du poulet.

5/ Molécules d'acides nucléiques selon la revendication 4, caractérisées en ce qu'il s'agit de molécules d'oligonucléotides correspondant à une partie d'exon.

6/ Molécules d'acides nucléiques selon la revendication 4, caractérisées en ce qu'il s'agit de molécules d'oligonucléotides correspondant à une partie de région polymorphe qui n'est pas liée à la fonction des systèmes du CMH, telle que les régions microsatellitaires.

7/ Méthode de génotypage d'oiseaux d'élevage et notamment du poulet, caractérisée en ce qu'elle comprend

- l'amplification d'un échantillon d'acide nucléique provenant de l'animal à étudier à l'aide d'un ou de plusieurs couples d'amorces capables de s'hybrider spécifiquement avec l'acide nucléique d'une région polymorphe des systèmes Rfp-Y ou B du CMH desdits oiseaux,

et

- la détection des produits de PCR obtenus.

8/ Méthode selon la revendication 7, caractérisée en ce que les amorces sont élaborées à partir des molécules selon l'une quelconque des revendications 3 à 6, et de tout gène (et région apparentée) codant pour une protéine impliquée dans le contrôle de la résistance ou de la susceptibilité aux tumeurs viro-induites chez les oiseaux d'élevage et notamment de poulet, particulièrement les gènes de classe II B-L, 17.5, 12.3 et B-FIV.

9/ Méthode selon la revendication 7 ou 8, caractérisée en ce que la détection des produits de PCR est effectuée par séquençage.

10/ Coffret ou trousse pour le génotypage d'oiseaux d'élevages et notamment du poulet, caractérisé en ce qu'ils comportent les réactifs nécessaires pour la réalisation d'au moins une PCR et du test de révélation, selon la méthode de la revendication 8 ou 9, en particulier les amorces élaborées à partir des molécules d'acides nucléiques selon l'une quelconque des revendications 3 à 6.

Figure 1

BF V

```
B-F V
GGC CCC GGG ATG CCG CGG TTC GTG ATC GTC GGG TAC GTG GAC GAC AAA ATC TTC GGT
ACC TAC AAC AGT AAG AGC AGG ACT GCA CAG CCT ATC GTG GAG ATG CTG CCG CAG GAG
GAC CAG GAG CAC TGG GAC ACG CAG ACC CAG AAG GCG CAG GGC GGT GAG CGG GAT TTT
GAC TGG AAC CTG AAC AGG CTG CCG GAA CGC TAC AAC AAA AGT AAA GGT GAG CGT GGG
GGA AGC TGC AGC GCG ATG CGT CTG GGA CAG GAG CTC TGT GTG CCG AGG GTG TCC GCC
AGC CCC ACT GAG GTG TGG CCG TGC CCC ACG CCC AGC TGT GCT GGG CCG TCC ATG TGT
GGT GGC ACT GTC CCT GGG CCG CCC TGC TCC TGC GCC CAC CCA CCC CAC CCC AGC CTC
ATG GCA CTC GCG GTG CCC CAC AGC CCT AGA AGC CTC TCA CCT ATT ACT CTG GCT GTG
CCT CAG GGT CTC ACA CGA TGC AGA TGA TGT TTG GCT GTG ACA TCC TGG AGG ACG GCA
GCA TCC GAG GGT ACG ATC AGT ATG CAT TTG ATG GGA GGG ACT TCC TTG CCT TTG ATA
TGG ACA CGA TGA CGT TCA CCG CGG CGG ATC CAG TGG CTG AAA TCA CCA AGA GGA GAT
GGG AGA CAG AAG GGA CGT ATG CTG AGA GAT GGA AGC ATG AGC TGG GGA CTG TCT GTG
TTC AGA ACT TGA GGA GAT ACC TGG AGC ATG GGA AGG CAG CGC TGA AAA GGA GAG GTG
AGG ATG GGA GGG GGA CGT GGG GCT GGG CTG GGT GTG GGG CAG AGG CTC AGT GTG GGG
TGC TCA GCC CGG CCC ACA ACG TCA CCC ACC TGC AGT GCA GCC CGA GGT GCG AGT GTG
GGG GAA GGA GGC CGA TGG GAT CCT GAC CTT GTC CTG CCA CGC TCA CGG CTT CTA CCC
GCG GCC CAT CAC CAT CAG CTG GAT GAA GGA CGG CAT GGT CCG GGA CCA GGA GAC CCG
CTG GGG GGG CAT CGT GCC CAA CAG CGA TGG CAC CTA CCA CGC CTC GGC TGC CAT TGA
TGT GCT GCC GGA GGA TGG GGA CAA GTA TTG GTG CCG CGT GGA GCA CGC CAG CCT GCC
CCA GCC TGG TCT CTT CTC ATG GGG TGA GCT GGC AGC GTG GGG CAC GTG GGG TTG GGA
TTC GCA GGC TGC CCC TTC CTT TAC TGA CAA CGG CGC TCT CCT CCA GAG CCG CAG CCC
AAC CTG ATT CCC ATT GTG GCA GGG GCG GTC GTT GCC ATC GTG GCT GTC ATC GCT GCG
GTC GTT GGA TT
```

Figure 2

B-FVI

```
GGC CCC GGG ATG CCG CGG TTC GTG ATC GTC GGG TAC GTG GAC GAC AAA ATC TTC GGT
ATC TAC GAC AGT AAG AGC AGG ACT GCA CAG CCC ATC GTG GAG ATG CTG CCG CAG GAG
GAC CAG GAG CAC TGG GAC GCG CAG ACC CAG AAG GCC CAG GGC GGT GAG CGG GAT TTT
GAC TGG TTC CTG AGC AGG CTG CCG GAA CGC TAC AAC AAA AGT GGA GGT GAG TGT GGG
GGA AGC TGC AGC GCG ATG CGT CTG GGA CAG GAG CTC TGT GTG CCG AGG GTG TCC GCC
AGC CCC ACT GAG GTG TGG CCA TGC CCC ACG CCC AGC TGT GCT GGG CCG TCC ATG TGT
GGT GGC ACT GTC TCT GGG CTG CCC TGC TCC TGC GCC CAC CCA CCC CAC CCC AGC CTC
ATG GCA CTC GCG GTG CCC CAC AGC CCA AGA AGC CTC TCA CCT ATC ACT CTG ACT GTG
CCT CAG GGT CTC ACA CGA TGC AGA TGA TGA TCG GCT GTG ACA TCC TGG AGG ACG GCA
GCA TCC GAG GGT ACG ATC AGT ATG CAT TTG ATG GGA GGG ACT TCC TTG CCT TTG ATA
TGG ACA CGA TGA CGT TCA CCG CGG CGG ATC CAG TGG CAG AAA TCA CCA AGA GGA GAT
GGG AGA CAG AAG GGA CGT ATG CTG AGA GAT GGA AGC ATG AGC TGG GGA CTG TCT GCG
TTC AGA ACT TGA GGA GAT ACC TGG AGC ATG GGA AGG CGG CAG TGA AAA GGA GAG GTG
AGA ATG GGA GGG AGA CGT GGG GCT GGG CTG GGT GTG GGG CAG GGG CTC AGT GTG GGG
TGC TCA GCC CGG CCC ACA ACA TCA ACC ACC TGC AGT GCA GCC CGA GGT GCG AGT GTG
GGG GAA GGA GGC CGA TGG GAT CCT GAC CTT GTC CTG CCA CGC TCA CGG CTT CTA CCC
GCG GCG CAT CGC CAT CAG CTG GAT GAA GGA CAG CAT GGT CCA GGA CCA GGA GAC CCG
CTG GGG GGG CAT CGT GCC CAA TAG GGA TGG CAC TTA CCA CAC TTC GGC TGC CAT TGA
TGT GCT GCC GGA GGA TAG GGA CAA GTA TCG GTG CCG CGT GGA GCA CGC CAG CCT GCC
CCA GCC TGG CCT CTT CTC TTG GGG TAA GCC TGG CAG CGT GGG ATG TGT GGA GTT GGG
ATT TGG GGG CCG CCC CTT TGT TTA CTG ACA ACG GTG CTC TCC CCC AGA GCC GCA GCC
CAA CCT GAT CCC CAT TGA GGC TTG GCT GGT CGT CCC CTT GGT GGT TCT CTT CGT TGC
TTT GAT TGC ATT
```

8.4 génomique

Figure 3

```
GGA TCC GGG GTG GGT GGC AGT GGC TGT GTT TAG GTC GGC CTG TGG GGA AAG
CCG GGT TGT CCC ACC CAT GTC CCC TCT TCC AAC ACT GTT CCT GAA TGA GTT
TTC CCT CTC CGA CCC TTT TTT TAA TGG GTT TCA GGG ATT TAA AAT TAA TAT
TGA CGA AGT GAC GGA GGG GGT GGG GCC ACA GCG GAG CCG AAA GCG AAA GCA
GCG GAG AGC AAT GGC TGC GGG GCT GCG GCT GCT GCT GGC GGG TGA GAC CCG
ACC CCC CCC GGC CCC CTC ATG TCC CAC CAC CCA TAT CGC CCC CCC CCC TCC
TCC TCG CCC CAT GCT GAG CCT CTC CCC CAC CCC CAG GGC TCT GCT GGT CCC
AAT TTA GGG TGG AAG ACG CCG CCT CCC CTC CGC CCC CCC CCG CTC CGG TGC
GCT GCG CGC TGC TGG AGG GGG TGG GGC GCG GGG GAG GGC TGC CGG GGG GGG
GCA ATG CCC GTC CTG CAC TGC TGC GCT TTG GGG GGG ACG CGG AGA CCC CTC
CCG AAC CCG GCC CGG AGC CCG AAG TCA CCT TCA ATG TCA GCG GTA CGT GGG
GAC CCC CGT CAC TGT GCT GTG CGC CTC CTT TAT CCC CAC CCC CCT CCA TGT
CCC CAT CTC CTT TAC TTC CCA CAA TGC TCC CAT CCC CCC CAG AAT GTC CCC
AGA GTC CCC CAA ACC CCC ATG ACC CCC CCC ACG ACC CCT GGT TCC CAT TAC
CCT CTC ACG TCC CCC AGT GTC CCC AAG ATT CCC ATT ACT CCC CGT ATC CCC
ATT ATC CCC AAA ATG TCC CCC AAT GTT CCC ATC ACC CCA ATG TTC CCA AGG
TCC CTA TCG CTC CTC AAT GTC GCT ATG ATC CCT ATT CCC AAA ATG TCA CCA
ATG TCC CCA AAA TCC CCA TTA TCT CCC ACC TCT CCA AAG TCC CCA AGA TCC
CCA TTA CCC CCA ATA TCC TCA TTA CAC CCC AAA TGT CCC CAA TGT CCC CTC
CAT GTC CCC CAG AGA CCC CAT TAG CCC CAA TAG CTC CCA AAC TGT CCC CAG
TGT CCC CAT TAA CCC CAA AAT GAC CCC ATT ACG CCC CAC ACC CCT CCC AAC
CCC ATG CCC TCA GAC CCC TTC ATC CCT CTC ACT CCT CTC TCC CTC GCA GAC
CCC TGG GGG ACT CTA GCC CCA CTC GGG TCC CCC CCC GGA CTC CCC CCA GCT
GCG AAC TGA ACC CCA CGA ACC CCC AGA CCG GCT CTG ACC CAT GGA GCC GCC
CTC TGC ACC CCG ACG CCC GCA GCC CCC CAA CCG CGG GGG GGC AGT GGT GGG
TGG CGG CGG TGG GGA CCC CGC AGT ACG GTG TCA CTG CGC TGC TGC AGG GGG
GGA TGG GCA CAG AAG GAA CCA TCA CTG CCG CCG GTA AGG GGG AAC TTG GGG
TGT CCC TCC CTG GGT GTC CCC ATG TCC CTA TCT GTC CCC CAG TGT GTC CCC
ATT TGT CCC CTC CTC TGC ATG TGT CCC AAT GTC TCC ATA CAT CCC ATA ATA
ACC ATA TGT CCC CAC TCA TCC CCA TAT TCC CCA TGT GTC CCC ATA TCC CCA
CAC ATC CCA GTG TGC CCC AAC ACA TCC CCA TGT GCC CCC CCC CAT GCA TCA
CTA CCA TCC CCC TAT CCC CCA AGT GTC CCT GTG TCC CTG CAG TTT CTC CCT
GTC CTC ATG TGT TCC CAT GTC TCC ATG TCA CTG TGT CCC CGT GTC CCC ACA
CAT CAC CAT GCC CCC CAC TGC AGC GCC CCC ATG TCC CTT CAC CTC TCC ATG
TCC CCC AGT GTC CCC TAT CCC CTC ATT GTC CCC ATG CCC CCT CAC CTC CCC
GTG TCC CCC GTG TCC CTA TGT TCC CCT GGT GTT TCC ATG TCC CCT CAT GCC
CCC ATG TCC CCT CAT GTC CCC ATA TCC CCC AGT GTC CCC ATG TCC CTT CAC
CTC CCC ATG TCC CCC AAT ATT CCC ATA TCC CCT CAC CTG CCC ATT TCC CCC
CGA TGT TCC CAT GTC CCC GCA CCT CCC CAT GTC TTC ACA GTG GCC CTG GCG
GTG CTC ACC CAC ACC CCG ACC CTC CGG GCC CGT GTG GGG TCC CCC ATC CAC
CTG CAC TGC GCC TTC GCT GCC CCC CCA TCC TCC TTT GTC CTC GAG TGG CGT
CAC CAG AAC AGG GGT GCG GGG AGG GTC CTG CTG GCC TAT GAC AGT TCC ACC
GCC CGC GCC CCC CGC GCC CAC CCC GGG GCC GAA CTG CTG CTG GGG ACA CGG
GAT GGG GAC GGG GTG ACA GCG GTG ACA CTG CGG CTG GCG CGG CCA TCA CCG
GGG GAT GAG GGC ACC TAC ATC TGC TCC GTG TTC CTG CCC CAC GGG CAC ACA
CAG ACA GTG CTG CAG CTC CAC GTC TTT GGT GCG TCC ATG TGG GGC AGG CGG
TGT TCC TAT GGG GTG TGG GGT TGG GCA GTG TTC CTA CGG AGT GTG TAT GAC
TGG GTG GTA TTC CTA TTG GTC AGA TAG GAC ATA TGG GAG CAG GCG GTA TTC
CTA TGG GGC TGT AGG GTG GAT GGG ACT GGG TGA TAT TCC TGT GGG GGC TGT
```

AGG GTG GAT GGG ACT GGG TGG TAT TCC TAT GGA GGC TAT AGG GTG GAT GGG
ACC GGG TGG TAT TCC TAT GAG GAC TAT AGG ATG GGG TGG CAT CAT CCC ATA
GTT CAC CTG TAG GTT TAT AGG GGG GGA TGA GCC CTA TAC AGC GTA TGG GCT
ATA TGG ACC GAT GTC CCC CCA CAT GTC TCC AGA GCC CCC CAA GGT GAC GCT
GTC CCC GAA GAA CCTGGT GGT GGC CCC GGG GAC GTC AGC AGA GCT ACG CTG
CCA GTC TGG CTT CTA CCC CTT GGA TGT GAC GGT GAC GTG GCA GCG CCG CGC
CGG GGG CTC GGG GAC ATC ACA GTC ACC CAG GGA CAC AGT GAT GGA CAG CTG
GAC TTC AGG TCA CCG CCA GGC AGC CGA TGG AAC CTA CAG CCG GAC GGC GGC
AGC ACG GCT GAT CCC CGC ACG CCC CCA ACA CCA CGG GGA CAT CTA CAG CTG
CGT TGT CAC CCA CAC TGC ACT GGC CAA ACC AAT GCG TGT CTC CGT CCG ACT
GCT CCT GGC TGG TGA GGG GGG ATG TGG GGA TAT TGG AAA CAC GTG GAG GTA
TTG GGA TGC TGG GAC CAT GGT TAG GAG GGT CTG AGG GAC ATC AGG ACC ATG
GCC TGG GAC AAT GGG AGA TCA TGG ATT TGG GTT GGG GAC CCC ACC CAG GAT
GGT GAC ACT GTG CTT AGG GCT GTC GTT GTC CCC ACA GGC ACC GAG GGA CCG
CAC CTG GAG GAC ATC ACG GGG CTC TTC TTG GTG GCC TTT GTC CTC TGT GGC
CTC ATC CGT TGG CTC TAC CCT AAA GGT GAG TGC TGT TCC CAC ATC CCA GTG
CCC CCA CAT CCT CAC ACC CCA ATA TCC CAA TGG CCC ATG TCC CCA TGA GCA
ATG TCA CTA TGT CCC AAT ATC CTA ATG ATG CTG TGT ACC CAT GTG TCC CCA
TGT CCC TAT TCC ACT CAC TCT TTC TCT CCC CTC AGC TGC ACG ACC CAA AGA
GGA AAC CAA GGT AAC ATT CCT CCC CAA AAA CCC CAA ATC CCC CAA AAC ACC
TCC AAG CAC CCC AAA ACT CAC CAT TCT CAT TCC CCC CCC CCC CCC CCC CCC
CCC CAT GCC TTG CAG AAA TCG CAG TGA CCT CCA CTC CAG CTC TCA GCA CCT
CAG CTC CAG ATA AAG AGT TTT TCA CCC CAA AGT TAT ATA TGT GTG GTG GTG
TCC CCA CAG ATC TGG GTG CAG AGG GGG GAG AAA TGG GGG CAA ACT GGG AGC
AGT GGG AGC AGT GGG AGG AAG TCC TGG GTT GGT GAG GCA GAT GAG TGG CAC
CTG GGG ACA TCT GGG TGC CAT CCC TTG TGG ACA TCT GGG TGA CAC TGC ATT
GCC TTG GGT GAC ATT GGG ATC CTC AGG TCA CTG CAG

Figure 4

B-FI

```
GT CGA CGGGAT CTGGATAGGT CGT CAGT CAT CCTAATTAAGGAGGGA CAA CAGTGAATGGG
GAGGAG CCGATGA CT CAGG CTGGGAGTGGTGAT CCCAGAGGTTT CCT CTG CTGT CAGTGAC
T CCGTG CTTT CG CTTT CG CTT CA CAA CCTGAGGGAG CG CATT CTG CCTGG CG CCCGATGAC
GT CA CATAAA CCCCCGA CTG CCATTGG CGGAGAGG CGA CGGAGGAG CCAATGGGGG CG CGG
GG CGGGG CGGAGGAGTAGGAAAAG CTGAAGGA CGTG CG CTGGGTG CGG CGGA CTTGAGAGT
G CAG CGGTGTGAGG CGATGGGG CCGTG CGGGG CG CTGGG CCTGGGG CTG CTG CT CG CCG CC
GTGTG CGGGG CGG CGG CCGGTGAGTG CGG CCGGA CCGGGA CCCCT CCCCG CCTGTAA CCCC
A CCCCGGG CTGTG CCCGTGGGAT CCT CAGA CCCCCA CCCG CGG CT CA CGG CCT CG CTG CCG
T CCG CCCCCG CAGAG CT CCATT CCCTG CGGTA CGT CCATA CGG CGATGA CGGAT CCCGG CC
CCGGG CTG CCGTGGTT CGTGGA CGTGGGGTA CGTGGA CGGGGAA CT CTT CGTG CA CTA CAA
CAG CA CCG CG CGGAGGTA CGTG CCCCG CA CCGAGTGGATGG CGG CCAA CA CGGA CCAG CAG
TA CTGGGATGGA CAGA CG CAGAT CGGA CAGGG CAATGAG CGGAGTGTGGAAGTGAG CTTGA
A CA CA CTG CAGGAA CGATA CAA CCAGA CCGG CGGTGAG CA CGG CCGGGG CCG CGG CT CCGT
GGGTGTGGGATGGG CT CCATGG CG CAGTG CCG CCCA CA CCCCCCAGG CCTGG CCCTG CCCG
G CGG CA CCGT CCCGGGG CTG CCCGT CA CAG CCCCA CCG CG CT CGGGGTG CCG CGT CCCGGG
GGGA CCCCAA CCCAT CCCCG CTG CAGTGGGAG CCCGGAG CCGGAGGGG CCCCT CA CCCCCT
G CCCGG CTGTGTTT CAGGGT CT CAAA CGGTG CAG CTGATGTA CGG CTGTGA CAT CCT CGAG
GATGG CA CCAT CCGGGGGTAT CAT CAGA CAG CCTA CGATGGAGAGA CTT CATTG CCTT CG
A CAAAGG CA CGATGA CGTT CA CTG CGG CAGTT CCAGAGG CAGGTT CCCA CCAAGAGGAAAT
GGGAGGAAGGAGGTGTTG CTGAGAGGTGGAAGAGTTA CCTGGAGGAAA CCTG CGTGGAGGG
G CTG CGGAGATATGTGGAATA CGGGAAGG CTGAG CTGGG CAGGAGAGGTGAG CGGGGT CGG
GGTGGGGGGGGGGGGGG CGGA CG CAGTGTGGGGT CGGA CGTGGGG CGGGGG CT CAT CGTG
GGGAG CT CAG CCCGG CCCT CA CTG CCG CCCA CCCA CAGAG CGG CCTGAGGTG CGAGTGTGG
GGGAAGGAGG CTGA CGGGAT CCTGA CCTTGT CCTG CCG CG CT CA CGG CTT CTA CCCG CGG C
CCAT CG CCGT CAG CTGG CTGAAGGA CGG CG CGGTG CGGGG CCAGGA CG CCCAGT CGGGGGG
CAT CGTG CCCAA CGG CGA CGG CA CCTA CCA CA CCTGGGT CA CCAT CGATG CG CAG CCGGGG
GA CGGGGA CAAGTA CCAGTG CCG CGTGGAG CA CG CCAG CCTG CCCCAG CCCGG CCT CTA CT
CGTGGGGTGAGTGAGGGGATGTGGGG CTGGGGGG CTG CGGG CTG CCCCTT CCCCTG CTGAT
GG CCCCG CT CT CCCCCAGAG CCG CCA CAG CCCAA CCTGGTG CCCAT CGTGG CGGGGGTGG C
CGT CG CCATTGTGG CCAT CG CCAT CGTGGTTGGTGTTGGATT CAT CAT CTA CAGA CG CCAC
G CAGGTAAAAG CAGAGGGGTG CAGG CGGG CAGTGGGGG CTGTAGGGGGAT CTGGGT CCCCC
CTTGGGAG CCCCCAA CCTGG CTGTGATGTGAA CCTGTGATGAAG CAT CT CT CTGT CTG CAG
GGAAGAAGGGGAAGGG CTA CAA CAT CG CG CCCGGTGAGTGATGAGGG CAG CG CTGT CCCCC
A CCT CTG CCCAGTG CCAGGGTGGT CCTGGGGT CCCTG CTTT CT CCCAAGGTA CCCATT CCT
GGTG CTTGGGG CTG CT CCATG CCCCATAGGGAG CA CAGGG CTGGAT CT CA CAG CTGTT CCT
CCCT TATAGA CAGGGAAGGTGGAT CCAG CAG CT CGAG CA CAGGTG CGGTGTGGGG CTGTGG
GTTGGGAGGGGT CCGTGTG CT CT CTGTGGTA CTG CCCAGGG CTGGG CTATG CTGGGG CT CT
G CGGGGAGA CCCCCGGAG CAGAGGGTTGGGATGTGAA CCTGG CCCCGTGGGA CAT CAT CCC
TT CT CAT CCCA CAGGGAG CAA CCCCG CCAT CTGAGTG CTGTG CTT CAG CCTG CAAGGAG CC
AA CAGT CCA CA CCAG CATTTGGGGT CGGTGATGGA CA CAG CCCCAT CCT CCTGA CCT CT CA
CAT CT CATT CTG CTT CCTATG CTGA CTGTTATG CTTTG CCTG CA CTG CTT CCTGTGAAATA
AAATGATGGG CCATT CTGTG CT CAG CTTG CCTG CATT CTG CA CAGTG CTGTGGTTGGGGAT
GGGGTGGGTGAGAGGA CCGTGT CCAGTTTGG CTG CT CAGGGTG CAGATGTGG CCCTGTG CT
GAGTA CCCA CTG CCCT CCCCCCCTAT CTG CCTG CTG CT CA CT CCCCCT CCTGTA CCCCCAT
CCCTT CT CA CCT CT CCT CTGTGAA CCCCATG CTGGTGGTTG CTTG CT CCCTGT CCTGG CAG
AA CT CT CATTTT CCCAATGG CAT CCCTGGGTGTTGGGATGTGGT CT CCTTGGT CCT CCCCC
CAG CAGT CA CTG CA CATAT CCCCCCCA CTT CCCCCCTAGGTTGTTGT CCCA CAG CA CT CCT
ATTT CCCT CT CCCCCCCCCCCCCCCCCCCCCCG CCCAT CCAG CTG CCT CTG CAAT CCT CAC
CCTTG CCCA CA CA CAA CTTTG CG CA CT CCA CCT CCCT CAT CCCG CCCTT CCCCCAG CT CT C
CTGT CCCTG CTGG CCCCCCT CCCCCCCCCCCCATTGTA CCCTA CA CCCAAATAAATATGTTT
GTT CTG CTG CCCT CCAG CGGT CT CCTGGTTTATTT CCCCCCGATTTGTTGTTGTTGGGG CG
```

TCCGCTCTTCACCCTGGGGGGAAGGGGCTCTGGGGGTCCCTCATTCTCCCTGCACTTCTTA
CAGCACCGGGACTCCCGCGCTGAGATCCCATCACACCCGGGTACAAACATGCGGCTTTATT
CCCAGTTCTGTGTCCCACCCCCGGCCCTGGTGGCACTCAGTGGCACCGCAGTCCATGCAGT
GGCCGTTGTGTGTCGTACAGCAGCGGTACC

12.1

Figure 5

```
ATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGC
ACCTATCTCAGCGATCTGTCTATTTCGTTCATCCATAGTTGCCTGCAAC
TCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCC
AGTGCTGCAATGATACCGCGAAGACCCACGCTCACCGGCTCCAGATTTAT
CAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCTGCA
ACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGT
AAGTAGTTCGCCAGTTAATAGTTTGCGCAACGTTGTTGCCATTGCTGCAG
GCATCGTGGTGTCACGCTCGTCGTTTGGTATGGCTTCATTCAGCTCCGGT
TCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAAGC
GGTTAGCTCCTTCGGTCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAG
TGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATG
CCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATT
CTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAACAC
GGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGA
AAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATC
CAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTA
CTTTCACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCA
AAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCTTCCT
TTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGAT
ACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACA
TTTCCCCGAAAAGTGCCACCTGACGTCTAAGAAACCATTATTATCATGAC
ATTAACCTATAAAAATAGGCGTATCACGAGGCCCTTTCGTCTTCAAGAAT
TCCCGCCCGTAGCGCGCGCACCAGCCGGCATCGCACCCGAGCACCAGC
TCCCCCGTCGTCCAGATGCCCACGGGCCACGTCGAGGCCGACGGGGAGAA
ATACACGTACCTACCTGGGGATCTCAACAGGCCCCGGGTGGCCAACCAGG
TCGTGGACGCGTTGTGCAGGTGCGTGATGTCCAGCTCCGTCGTCGGGTGC
CGCCGGGCCCCAACCGGCGGTCGGGGGGGCGGTGTATCACGCGGCCCGCT
CGGGTGGCTCGCCGTCGCCACGTTGTCTCCCCGCGGGAACGTCAGGGCCT
CGGGGTCAGGGACGGCCGAAAACGTTACCCAGGCCCGGGAACGCAGCAAC
ACGGAGGCGGCTGGATTGTGCAAGAGACCCTTAAGGGGGGCGACCGAGGG
GGGAGGCTGGGCGGTCGGCTCGACCGTGGTGGGGGCGGGCAGGCTCGCGT
TCGGGGGCCGGCCGAGCAGGTAGGTCTTCGGGATGTAAAGCAGCTGGCCG
GGGTCCCGCGGAAACTCGGCCGTGGTGACCAATACAAAACAAAAGCGCTC
CTCGTACCAGCGAAGAAGGGGCAGAGATGCCGTAGTCAGGTTTAGTTCGT
CCGGCGGCGCCAGAAATCCGCGCGGTGGTTTTTGGGGGTCGGGGGTGTTT
GGCAGCCACAGACGCCCGGTGTTCGTGTCGCGCCAGTACATGCGGTCCAT
GCCCAGGCCATCCAAAAACCATGGGTCTGTCTGCTCAGTCCAGTCGTGGA
CCTGACCCCACGCAACGCCCAAAATAATAACCCCCACGAACCATAAACCA
TTCCCCATGGGGGACCCCGTCCCTAACCCACGGGGCCCGTGGCTATGGCA
GGGCTTGCCGCCCCGACGTTGGCTGCGAGCCCTGGGCCTTCACCCGAACT
TGGGGGGTGGGGTGGGGAAAAGGAAGAAACGCGGGCGTATTGGCCCCAAT
GGGGTCTCGGTGGGGTATCGACAGAGTGCCAGCCCTGGGACCGAACCCCG
CGTTTATGAACAAACGACCCAACACCGTGCGTTTTATTCTGTCTTTTTAT
TGCCGTCATAGCGCGGGTTCCTTCCGGTATTGTCTCCTTCCGTGTTTCAG
TTAGCCTCCCCCATCTCCCGGGGTGGGCGAAGAACTCCAGCATGAGATCC
CCGCGCTGGAGGATCATCCAGCCGGCGTCCCGGAAAACGATTCCGAAGCC
CAACCTTTCATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGT
TGGGCGTCGCTTGGTCGGTCATTTCGAACCCCAGAGTCCCGCTCAGAAGA
ACTCGTCAAGAAGGCGATAGAAGNNN
```

```
TGGGGTCCTCTTTGGTCTGATGGAGAGAGGTTGGCACCAGGGTAAGTCGC
TGCCTACATCACCACTGGTGTTTTGTCTCAGCAGCTGGTGTAAATTTCTG
CCATCTGGGCTATTTCTGTAGAAAGCAAAGAAGCTCTGCTGGTGGGCAGC
TCATCTCCCAGTGTGAAAAAGCAAAATGCAACGCATGCACCCTGCTATCC
ATGTGGBCCYAKCCCTCTCCATCAGCTGTTGAAGGAGAAATCTGCACTCA
GAAGAGATTGAATTGGGCTCAGATCTGGCTTGGGAAGATGATGATTCCAA
CCAGAGTCCAGGAGACTTTGGGGAATGCATGAATCCTATAGGAAAATGGA
TAACCCTTCATCCAAGAGCAAGCTGGCATGATGCTCTGGGGTGAAAACCC
ATAATGCCACCTGGTTTTAAGGTTTGGGGTGGCTTACAATGTGCAGCTCT
GCTTCCGGCGAGGCACTGGGAGCCCTAAACCCATGGAGAGGTCAAACCAG
TGCTGGAGGTCATTGTGGGCCCAGCTGCAATGGGAGGTAGGCAATTATGG
ACATCGCTGAAGCCACCCCACGCTCTGGGGAACTTGGGTTTTCACCTTTC
ACTGCACTTTAATGGGATTTCTCATCAATGTCTGCATGTTCTTGGCCACC
TGTTTAAAAATATAATAATAATAATTAAATCTTTTGCCCCACTGCGGGAT
GAGCAGCTGGTGGTTCCCAGCTCACAATAAACCACACTTGAGACTCCCTG
GAGAATTCGCTTTCTTTTTGCAGCTGGTTCCATGTKGGGSYKTTCAGCCC
CTCTGCAGCTCATAGGCTTTTCTTCACAGCCTCTGCTCCACCTATTGCTG
AAAAGGGGGAAATTTGAGATGGATCCCATTTTGTGAACATCTCCCMACCT
GTGGGTAATGCTCAGACCTCTCAGCCCTGTGGGTTTAATTTCTCTTTCTG
CAGCTTAATGGGTTGGGGATGTTCATTACTGCAATAATTAGTGATGGGAT
AGGGGAGGCAGGAGAGGATCCCGTCGACCGATGCCCTTGAGAGCCTTCAA
CCCAGTCAGCTCCTTCCGGTGGGCGCGGGGCATGACTATCGTCGCCGCAC
TTATGACTGTCTTCTTTATCATGCAACTCGTAGGACAGGTGCCGGCAGCG
CTCTGGGTCATTTTCGGCGAGGACCGCTTTCGCTGGAGCGCGACGATGAT
CGGCCTGTCGCTTGCGGTATTCGGAATCTTGCACGCCCTCGCTCAAGCCT
TCGTCACTGGTCCCGCCACCAAACGTTTCGGCGAGAAGCAGGCCATTATC
GCCGGCATGGCGGCCGACGCGCTGGGCTACGTCTTGCTGGCGTTCGCGAC
GCGAGGCTGGATGGCCTTCCCCATTATGATTCTTCTCGCTTCCGGCGGCAT
CGGGATGCCCGCGTTGCAGGCCATGCTGTCCAGGCAGGTAGATGACGACC
ATCAGGGACAGCTTCAAGGATCGCTCGCGGCTCTTACCAGCCTAACTTCG
ATCATTGGACCGCTGATCGTCACGGCGATTTATGCCGCCTCGGCGAGCAC
ATGGAACGGGTTGGCATGGATTGTAGGCGCCGCCCTATACCTTGTCTGCC
TCCCCGCGTTGCGTCGCGGTGCATGGAGCCGGGCCACCTCGACCTGAATG
GAAGCCGGCGGCACCTCGCTAACGGATTCACCACTCCAAGAATTGGAGCC
AATCAATTCTTGCGGAGAACTGTGAATGCGCAAACCAACCCTTGGCAGAA
CATATCCATCGCGTCCGCCATCTCCAGCAGCCGCACGCGGCGCATCTCGG
GCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCA
CAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAA
GATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCG
ACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGT
GGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCG
TTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGC
TGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGA
CTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGT
ATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTAC
ACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTT
CGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTA
GCGGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGA
TCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAA
CGAAAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCT
TCACCTAGATCCTTTTAAATTAAAAATGAAGTTTTAAATCAATCTAAAGT
```

CCATAATATGCCATTAGAAGTAACACATCCATCAATGATATATCCATAGA
ATACAAGAGAACGGTCTACATTTACTTCAGATCCCATTTTCAGGTTAACC
ATGAAAAAAATACCCAAAGACTGAATGTCACCATTCAGGGATCCCGTGTG
TAAAATCATGACTTCTGCTTTAATTATAAGAAAAATGAAATTCACTGTTT
TTATTCTCTTTTAAGATGAACTCTCAACAGAAGTTGGTGAGTATTTTTCT
GCCCTCCAGCAAAACCAAAGCATGCAGTTTGCAGTCTGTTTTGGATATAT
ATTGTACGTGGATATATAACCTGTATGTTATAACACCTCTGGTTTCCTTT
TCTCCTTCTTTTCCTCAGAAAAACGAGAGAGAAGAATTGGTGAGTATCAA
ACTTCCCCCCAGAAGTGGACTTTGGTGTGTTGGGAAGATCCATACCACAA
CGTTGGTGCCAAACTTAATGGAAATCCTTTGTTTTTTCCTTATGTTTTCA
GATGAACTCACTGCAGAGCTCGGTAAGTCGTGATTATAACTCATAACGAG
TTATAATGCTATTGTTATATATAATATACATATTATATATTGTTGCTATA
ATTCATAATAGAGCAAACAATCACAAGGCACAGAAATATGGGTTTGCTTT
GAGAGCCAAACCTTAGGAAGTGATAACACAATGGGAAGAGGACAATGACC
ATTTCTGTTGTTCCTCTTTTCAGAGCACTACAAGGCAAAAGCAAGTGAGT
GTCTCCTTCCTCATCTTCAGCACGTGAGAGATTTTGGGGGCTTTTGGGAC
GGCTATGGGGATTTACACATAATAAAACAGAAGATGAGAAGACAGTTTGT
TAACTTGAATTCAAACTGGTTTGAAATTGGTGAAATTACAGTATAAATAA
TCTCCCCAGTACCCAATTATACAATGGGATTAATTACAGCCTGCCCAGGA
AAGGAGCACTGAATTTTTTCCTGCGTCCATCCAGCATGAAGTCCATCAGA
CTTAAGCTTACAGCTTAAAGAATGGTTCATTTTTTTCATTTAACCCCCTC
GTAAGTTAAAAGATGGACTTCAGCATCACAGAAGTAGCCCAGAAATAGTC
AAAAAATGGGTCATGAATTTCCAGAGCACCCCCCCACACTTTCCTTGGTG
AATAGGAAAACAAATATTAAAACTAATTAATTGGTTTTTTTTTCTTTTTA
GGAAGATGTTTTGAGGAACACAGTAAGTGCCCTTTTCTCCCTTCTTTAAG
CATCACTTTTCACTTTAAGTCTGCATCACAGTTAATAATCCATCTCCTTA
TTATGCATTTTTAGGGAGAGGCGAAGAAAAGTTGGGTAAGTCATTTGGTT
AATTGGGTTTCTGCTTGCAGACCCCATCCAGGAGCTCATGTCCTCCTCTT
AGTGTCTGCACTGTAGAAATATCCAGGTTAGACGTGTAGGTAGGAAATAC
TGGACCTGCGTGGAGGTATTGCAGACCCCATTTATGTGTAGGGGAAGCAG
AACATCAAACTATTGAGCCTTGAGCTCCACGAAGACAAGCCACCCTCTTA
GATTTCAAGCGAAGTCGAGCTGAATAGATTTAATTCTTTCTTTCCCATAG
TAAATGTGACTCTGGACCCAGAGACGGCCCACCCTCGCCTCGTCCTCTCC
AAGGACCAGAAGAGCGTCCGATGGGAATACAGCCTGCAGGAATCCCCCGA
CGGCCCCGAGCGCTTCGACGCCGATCCCTGCGTGCTGGGTTGTGAAACCT
TCACCTCTGGGAGGCACTGCTGGGTGGTGGATCTCACAGAAGGGCAGTAC
TGCGCCGTTGGGGTCAGCAGGGAGTCCCTGCCCAGGAAAGGAGCCGTCAG
CTTTAACCCTGATGAAGGCATCTGGGCTGTGCAGCAATGGGGGTTCAAGA
ACAGAGCCCTCACCTCCCCTCCGACCCCACTGAACCTTCCACGGGTTCCC
AAAAAGATCCGCATCTCTCTGGACTACGAATGGGGCGAGGTGGCGTTTTT
TGATGTGGAGAACCAAATGCCCATCTTCACTTTTCCTCTGACCTCCTTTG
GTGGGGAGCGGCTCCGGCCGTGGTTCTGGGTGGAGCTGGGCTCCCTCTCA
CTGCCCAGATAACCCCGGAATCCCTGGAGGTGCTGTGGAGGTGCCTTACA
GCAGCTCTTCCAGACCGGGGTGGAAAAACTCTCAGGAAAAGCAGCATTAA
AACCTCATTCTCCCTCTTCCCAGTCAACCATTGTCATGCAAAAGAAAGGA
AACCCATCCTCAATGTCATCAGCATCCTCCGTGTGTCATGTCTGGTGGCC
CCCATTGATGTATGGGGTGGCTCCTGTTGGTGTCTGGTGCCCCCTATTGA
CGTATGAGGTGGCCCCCATTGACGTGAGGTGGCCCCCATTGACGTGAGGT
GGCCCCTATTGACATATGGGGTGGCTCCTGTTGATGTCTGGTGCCCCCCA
TTGACATGAGGTGG[illegible]CCAATGCCW
CMYGATTGCAGTTCCAAACTCTAGGGACGTTAAACGACCCACAGAGAGGA

AATCACCTCAAAATGAGCCTGAATGTTTGCACTGAGGACTGAGCACAGCT
GGGCACTAATTCATCTTTATTTCTCTCTTATTTACAGAGGAACGCGATCT
GAAAATCAGTAAGTGCTGCCCCAAAGCCATAGGGCTATGCTGGGCTTCAT
CCCCACAACATGAATTTTATAAATTAAATAAATAAATAAATAAATAATTT
TATATTTTATGTATTTGATATTAGCAGTATTTAAAAAAAAGAATAAAATA
ACTCAAGAATCTTAGGATCAATAGTAACACAATGATGCAACGTGGATACA
AAAGCAGTAATTCCTATTTCTTTGGGTTTTTATCCTTCCAGGGGAACACG
AAGCAGAGATACGTGAGTGTTATTTTATATACTCTATAATGGAAAACTTT
TTTCTCTGTAATATAAAAATAGGCTTTATTATTKGAGGGGTTTTTTGGCT
TAACGCAAATGCGAAGTGCTTGAAATTCTACGTATGAAATAGAGGATTTC
CCATAGAGAAAAACAGCAATTTGGGGCTGGAATAAAAGTTTCATTTCCTT
GCTGAAAAGTGAATGAAAAGGGGGGGAAAAGAACATAAAAATTGAGTTTT
TTCCCTCATTAATCTGTCATGAAATGGGTTGGGTTCCTGAATGGTGATGT
CAACACCTCGTTTTGGGTTCAGCCCAACATAATATGTGTCTGTCCTTTAT
TTCTGTATCACTGGTGTTAAAGAGAGCTGTTTTGAACTAATATCTCTTTT
TTAATTACTTTTTCTTTTTCTTTTTCTTTCCTTTTTTCTCCCGTTTCTCT
CTGTTTTGCTTTAAGGGCGCCTCACTGAGCTGCTCGGTAAGTGCATTTCC
TTCCTTGCATCTGTSAAWMCAGCWATAACCVHAGGYCCTATTTTGGGGGG
GAAGGAGGGGATAAAACACAATAATGATGAAATCAGTGCTTTGGAAAGGG
TGCAATTATTATTTCTCCTGCAAATGAATACTTCCTTTTCCCTTTTGTTT
GCAGAGGACCGCGATTCCGATGTCCGTAAGTCCTTTTGTTTGTCCCGGAG
CTGTGAATCCTCCAATGGGAAATGCAGAATTTCAGAGTCTGCCCCAAAAA
TGACCTTTTTGAGGCTACAAGGGATGGGAAAATAAGGAGAAATGTCCTTA
TTTATTGATCTCCTTGTTTATGTGCAAAACTGGGTGACTCTTCTCTGCCG
AACACGTTAGAAATAAGAACACAAAATGGGAGGAAATGGTATTTATTCAT
ATCTGTTGTTTTTCTGTTTAATTTTTAGGAGAACAGGACATCCTCATTAG
TAAGTGGCACTTTGGATTGATAAGAAATGCAGCTCCTGGGGACGTTTGGG
TGCTGCGATTGCTGGCACTGCTGGGGCTTTGTGTTGTGGTGGAAGTGGAA
TTACTTCAAAAGAAGAGAAGAATGGAATTATCTGGAGAAAAAGGGGAATA
AATGGAACTGTTTGGGAAAAGAAGGAGGAATAGAATGGAAATATTGGGGA
AAAAAGTGAAATAGAATGGAATTATTTCAAAAAAAAATGGAATGAAATTTA
GGGAGGGGGAAGGGGAAGTGGAATGGAATTATTTGGGGGAGAAAAAGGGG
AAAATTGAATGACTGGGGGGGGAATGGGGAAATAGGATGGGAKTWTTTTA
AAAATACAGAATTGTGAAGGTTTCAGCCCATCTCAGAGAGTTTGGTATCC
TCGAGTTCCCCCTTTGCAACCCATTGAGCATCCTTGGGATGACACCAAAT
TCTGTTTTCTCCTTTTCAAGGGAAACTGTCAGAAGAGCTCGGTGAGTTAT
TTCCACTTCTTACATACAAAACTGATTCTGGATAATCCTTTTGTGTGTTT
TCCTGCTTTGCCTCTTTGTGTTTTAAGAGGCAACTGCAGAAGGAATGGCA
CAAAGGGTGCAGAGGATCTTTGGGATAAATAACAGGGAAAACAGGGATGG
GATAGCAATGAGTTGGTGCAATAATCTATGGCACAAAAGGTGACGGCGTG
TTTCACATTTTGCTTTTTCTCTTCCTTTTAGAGGAATTAAGGGGTCGGGA
AGTTGGTAAGTGAGATTCCTTTCCCTCTTCTCCCCAAAAGGATAAGGGGT
AATTTGGATTCTGATCTCTTTTTCTCCCTTTTTGTTCCTAGAGGAGAGTG
TTCTGGAGAGGGGTGAGTATCATTCTCTTTCTACTGCTGCTTTTGACTGA
AGGAATCCCCCATAAGCATGCTGGTGGGATGGGAATTCTACATCTGATAC
ACAATTATTATCATTTCTTCATTTTTTATACACAGAAATAGATAATTTTT
TTCCTTTCTTTTCTCTTTTCCCCCTTTTTTAGAGGAACATGATGCCAGAA
TTGGTACGTGTCCATCTCCCCCTGCTTTTGTGGTGTCTTCAAGAAGGCCA
ATGGGGTCATTTGGGATTGTTTGGGTTGAGGATTGGGTTCTTGATTGAAT
TTGGGGGAGGATTC[illegible]ATCTCATGT
TTTCCTATGGGCTTGGATCCTTCTGTTGGATACCTAAGAATACCTGAAAT

TCCTGGGGGCAAGAGGGCACCGCCGTGTAAAAAAWACATATATTTAACCA
TTTTTCCTTCTTTTTTTCCCATTTAGGGGACCGTGACTCAAAGCTCCGTG
AGTGCCACTCTCCTCCTGATTAAAATCTGAGTGAAGATGTGGATTTTCCT
CAGTGTGCTCCTACAATCTCACTTTTTCAGCACAGTTTTCCCCAAANTTT
GTGTTTCTCCACCCAACCCCTTACACTGATCCTAAATGGGTGTATTGCCT
GAATCAGTGGTTTTCTTCCCTATTTTNGATCTATCCNGTTTTATTCCAGT
ATATGTTTTTATGACATAATTTTATGACATATTTTGTTGTATGATGCCCA
TAGACCTTATTACCATTGCCTGCCCCTGTGTGGATCAGAAAATATATTTA
ATATAAAACAGATATCTCTACTGACAGTGATTTCTGATGCACCCATGAAG
GAAAAGGATTTAAAATAAACTTTAATTTTTCCCTTTTTAGGCAAACTGAC
AGCAGAACTCGGTAAGSACMTKKYCKTCSYCATTCCCATAAAACAAATGA
AATTATGGATGGATGGATGGAAATTAACCAGTTAGTAGAGGTCAGCTTTG
CTCTAGGACGGTCTGAAAAGTGACCAAAATCTGCTTTTACTCATTTTTCT
TCTTATTTTTTTGTAGCAAAGTGCGATGCAACGATCAGTAAGTGCTGCTG
CATGTGGGGGTACCTCCATCTTCGGGTCATTTTCTGCTGTTTCAGCATTG
AAAGGACATCAGAATTCCTTAAATCCAACAAAATTGGGGTCACTCGAAAG
GAAATCTTTGCAGATATGGGGGAAATCAGAGCCAAATTTTGAGGGGGGGA
GGGAAAAATCTCAGGGGTGTTTCAGAAATCCAATGGGATCTGATGGTATTT
TCTGCTCTCAGGACTGTTTACAGTGGAACTCGGTGAGTCCGTTTCCTTTT
TGTTTTTTTTTTCTAATTATTATTTATTAGTAGTATTATAAATCAATATT
ACTGTTGCTTATACATATTGTTGTACATTATATACATAATACATACATTA
TATACAGTATATAGTATACAGTAGTATATAATATTATGTATTATATATAT
ATAATGTATTATAATAATGTCATATCTAATATATGTCTGTATTAGATATA
ATGCATATATATTATTGTACTACAGTCATATTATAATACATTTACTTATA
TCTGCCTTTTTCCACACGTTTCATTGACCTGATTAAAAACTAAATCCTAA
AGGCAGAAGAAGATGAAAACCCCCAAATTAACACCAAATAATTGCAGCTA
TAGATCATATCTATCAAAAGCAAATTTGCCTTCAGTCCACATCACGAAAT
TAACAATAGAAAGGTTTAAATTTGGAACGTACAAACAATGACAAATAACC
CCCAATGGCTTTTCTCTTCTTGCAGGAGAGCGTCACACCAAAATAGGTAC
GTGAGGTGTTTGCTACCTTCGTTTGGAAGGAAGAAATTGCATTAATAAAA
CCTCTGTCCAATATGAAGCCGGGGTCAAATTACTCATAAATCACCACTGA
TTGTCCATGAATTAACAGGGAAAAAAAAGGCTAAACTTGAAAATAACATT
TTTTTCATCTCTCTTTTAAGGGGAACTCACTGCAGAAGTTGGTAAGTCTC
TTTCCCATCAGTTTAAGCAAAAATGGTTCATCAGATATATAATAATCCCT
TATTTCTGCTTGTTTTTAGGGGACTACAACAGGAAACTTCGTAAGTGCCT
TTAACTTCTCCCATTAAGAGTTAAACCTTTCAATATTTTTGATGCTTCAA
TGTGCTGAAGCCACCAAAAATGTGTTTYAATTGTAAAGGGGCTGAGCGTC
AAACCTGAACACTGCCATGTTGGGGGCTGAGATTCGTGGGATTTGGGTTT
TCAGTGTGAAAATGCCTCTGGGTTTCTGTGCCTGAGCTCAGGGAAACACG
ACCAGGGCTTCCCAGTAGGAATGAGACCCCAAAATATTTCTACCTGGGGS
CTTTTCCCATTGGGGAATTTATTCTGTWAATCCATATTTCTCCMCSTTTG
ARCGTYMCTCMTCMAATGTCACAATCTTGGCAATGTTGAGAAGATATATA
GATATCTATTTTAATACTGATTAATATGGAGGTGTTTGTGTTGGTCAGTG
ATGTCATCGGGAAAAGATCTGAGTCATTGAATCCCCATTTCTTTTCTCTT
TATTTTAAGGGAAACACGCAGCAGAACTTGGTAAGGGAATTCCCTCCCTG
GGTTTGTTCTCTTGTTTTTCTCTTTTGGAGGGGGATTTTTTCTATGTCTT
CTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTC
TTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATG
TCTTCTTTCTAAGTCTTCTTTCTATGTCTTCCTTTCTATGTCTTCTTTCY
AWGTCTTCTTTCKAWGTCTTCTTTCYAWGTCTTCTTTCTWWCCTTCTT
TCTTTCCTTCTTTCTTTCCTTCTTTCTTTCCTTGGATTTTGAGCCAAAAA

TAGAAGAATGGGATGCAAAAATCAGTGAGTGCCCTTTTTTCCTCTCCCTT
CACGGTGAGGTATGGGTGTGGAGGACCTGAATTAATGTGAATTCCTCTGT
TTTAAGGGAAGCTAACAGAAGATTTTGGTAAGTCGCTTATTTTCCTCGAT
CTGAGTGCATATTTCTACACCTTTACCATCAGTGATGACCAACGTGTGTA
TGCATTTCTCTTTATTCCATTTAGAAGAGAGCGACACAGAGCTCGGTGAG
TGCTTTGGGGTCTTATCAAGGTGGAAAGATGCCCCTCTGTGCAACAGTGG
GGATTGGGAGAAGCCCTTCAGCTCTTCCATTTATCCACATCTGATACCCA
GATGGAGTCAGGATGCAGAACTGGAGGAGGAGGGCCAAAGCTTTGGGCAT
TTTGGGGTTATTTTTGTTCCTCGAGAGCTCCCAGGATTGACCCGTGTCCA
TTTCTGTGTTATTTCCAGAGGAATGTGACACAGAAGATGGTGAGTGTCCT
CCGTGAGAGGGCTCAGAGAAAGACTTCCACCAAATCTCCCTCCTTTAATG
TATATTCTGATGTATTTATTTAAGGGGATCTCGCASCTGAGATCGGTAAG
TCGTGTGTGGTTATACACCCCTATKTGTGCCTCCCATCAAASAGGGCTCT
GTGCASCTTGAGTKGTGTTCCCACAGGGTTTGTCYCCCACTCTTCACACG
AATATGGGGGTAAAACCCAACAAAATGGCACAGAGGGATTGCAGAAAGGG
CGGGCGTTGGGTGGCGCTGTGTTCTGATCCAAGGGAGGGTGAAGCTCATG
AGAATGGTTCTTTCTTTCTCTTTTTGAAGACAATCTGACTGCAGAGCTCG
GTGAGTGCTTCCCTTTCCTCTCTGCTTCGTTTCACTGTTGGGTTTTTAGG
GGGGAAAAATGCTTATTCCCCCCATAAACACACACATGTAACCCAACCTG
GGCTGGAAGAAGGGTCCAAACGTTCATAACTGCAGACTGCAATTATCATT
CCCAATTGGAAGGTGATTCCATCATGAACCATCCACCCATCACAGTGGAA
TTCTGACAGTGTTTCTCTCTGTTTTCCCTTTCAGAGGAACGTGATAGGAA
AATCAGTAAGTGCCTTTTTCCTTCCAGAACTGATGGGAAGCGATGGGTTA
GGGTTAGGGTAAGGGTTAGGGTAAGGGTTAAGGTTAGGCTTGGGGAAAAA
TAAGTTAATACATTTCATTATGGCTTAGAATTGAAACTAATGTTCATCTA
TTTCTTTGTTTTAAGGAAAGCTCACATCAGATCTTGGTAAGGGTTACTTC
CTTTAAACTATCCTTAATTCTGCAACAGTGCTGGGTATAGAGTAGAAAAA
TATGCATGTGAAGGTGTATGTATGCACATGTTAATTCATTCCTATTTATG
TACTCGTTAGTTGCTATATATGTATTAATTTATTCACATTATATATATAT
TTGTATATATTTGCAAATATTTGTATGTATGTGTGTATGTGTGAAGAGAT
TGGGGTTTCCTCTGGTTGAAGAGGGGGGTGAATGACAGCAGGTGTCCTTA
ATAAGCCTTATTTTCAAAACACTAACAAGGGAGAATTGGGATACACAGAA
ATAAAGCCTAAAAATGGGAAAAAGAAAAGAATGAAATGGGTAAAATATTG
AAAAGAACRAAAARTTTGGAGAAAAGAAATGACASTTTTGGTTGGGTTGG
GGCTGCTCTGCATTTCTCCRCTTATTTTCTCCCTTTGCTTTCAGGTGATG
TTGACACAAAGCTCAGTGAGTGGAGCTGCTCTTCCTGCCCCACATTTAAG
AGTATTTTTGGTATTTTTAAGACTGTTTAAGAATATTTGGACATTTCCTG
TGGAAAATGGATTTCTGGTCTGTAAAAAAAACCTGGGGCTTATTTTTGAG
GACGGAATAAATGTCCCAAAAAAGGGGGATTTTGGCATCAATTGACTGGG
AGGTGAAAAATAAAAGCAGTGATCTGAGCGTGTTGGGGCCAATGGATGAA
CCTCAATGATCATTGTGGTCCTTTTCAATCCAGGCCATTCTATGATTCTG
TGAAAGAAAAGAAGATAATTAACATTTAATTTTCTTCTTTCTCTTCTCAT
TCCAGAGGAACGCGACAGGAAAATCAGTGAGTGTCACTTTTTTGGGGCCA
AAACCCTCTGATTTGGGGAAGGGATCCCTGATAGAAGTGGTTAATCCTGT
TGGTTTTTCCCTCCTTGCAGCCAAACTCTCAGCAGAAATACGTAAGTCCT
TTTCCTCCCCAATCTGAACTGTTTCTTTGTATTCTTAGACTTCCTTTTTT
TTTTTTTTCTGTTTTAATTAAAATAATGCTTTTTTTTGGTTGGTTTTTTT
TTTCCCTATTTGACAGGCAGACTGACTGCACTGCTGGGTGAGTGGTGCCA
TTAAATCCGTGTGTGGTTTTGGGCTGAAAACCCTTAAAAATGGGAACTCT
GCACCCAGACAGMYYATSGTCWKWGCTTTKYYWCATTTGTAATAGAATAA
AAATGGGGGGAAATGGGCAAAATGAGCATTGCAAGKGAGCAGAGYTGCTG

CCCAAAATAGGCATGACTCAGCAAGCACCGTAGTGGGCATGATTTGCTTG
GGTGACCCCGTGGGTAAGGAGCCATTTGTTGGACACCACGATGTCGTTTT
TCACAGCCCTGTGAGCGCAGCGTCTTAAATTGCCCTCCAGACATTCCAAA
TTTGGAGAGCTCAAATGGCAAAGGTGAAATGGGCGTCAGCCCTCCGGGAT
GAAGGAATCTCTGCCGGGGTTTTCCGTTGGATCACAGCAGGAGGATTTGC
TTTCCTAAAGCATTAGAGTGACGTGGAGAGCCCAAATCGGACCCAGTGGC
CACATTCTCCCAAGGGAAAACCCTTCGGGTGCCCCTACGGTTCCTTTTCT
AGCATGATAACAAACTTCTTTTCCATCCGCCCATCCCCTTTTGGGTTTGG
AGGTTGACAAATCCCCACTGAAATTCCTATGTTGCACACATGTCCTTCAT
TCTTTAAGTAGGAGTTAGCAAAGGTTCCGCATTGACTTAATTCAGAGCGA
GATCAACAATTTTAGGCATTCTTTATGAACTTCACATTGTTTTATGCTGA
TCAGCAGCAAAAAAACATACAGGAATAGGAGTGTGTCTGTAGGAGTGCTC
TGCATTTTCTTGCTCGTTTGGCTGATTAAGGAAGCTGGGAGGAAATGTTG
TGAAATAATCCCAAGTGATGAGAGACTGTGGGTATGGGAGGAGATGCCCT
CTGTCCTGGTGAGCAGTAGGGACAGAAGACCTGAGCTCATTTCATATATC
TGTATATTAAGGCAATGCTAACCAGTGCTGTCGTGTTATTTGGGGCCAGG
AGTGGCTTCTGCCCCCGTTGGTGCCCATAAACCAGTGCTGCCCCATTKGG
GATTGGGGTTNTGTTGGCAGACAACATCCACCAACCAACCCATGGCTGAT
AGCAGAGAGGCGACCAGGTCAACCCTCCATATATCTCTGCAGAAACCTGT
TCCTGTCTATACAGGGATCCCCATCCCTCCCCCAGCCCTCCTTCCATCCT
CGGCATTTGGGTTGGCTATAATTAGGCTCTGGGAACGTTCCCCTGCTGCC
AGCACAGCTGTCGTGTCTGCAATGATCCTTCCAGCTCTCTGCGGACACGC
AAACCCTCCAGCAATCCTAAATACCCATTTCCTGCACTCCTGGGACAAAC
TGGGAGCTGCCAAAAATCTCCAGCCCCCCACAGACGTGACCATCACAGCA
CCAAGGAGCAGAGCAAGCGCAACGTGATTACGGTGCAGGTCGGGGTAAGC
CTTTCTCTTTCTTCCCACAGCCCAGGATTTGGGGGATCCTATTGGCTCTA
TGGGATCTGGGAGATGCAGGAGAAATGTGATCCCTTTGCTGTAGCAAAAC
AACCTTTTAGAGTCCTGCACCTGAATCTGGCAGTACTGGAAAGCAGGAGA
GGGATTAAGAGTCCTTCTGCATTATCCTGCTCATAGGGAAATACAGCACA
GAAATCATTGGGGCTGCTTCCTTTGCTTTCTTGGCACAAATTTAGGTCCT
CATTACAGCGTTTCTTTGACTGAGACCCCAATAGGATCTACAGGGGTAGA
ACAAAGCAGACAAAAAGTGATTGATGTTTCCTATGCGATTTGTTGCCTTT
TCCCATTGAGATTTCTGCTTTTCCTATGGGGCTTTTTGCTTTTTCACAGC
TTTTTTTATTCACTGTAGTGAATAGAAATTTTTAGGGCTTTTAGGTCATT
GATGCTGTTATGAACACAGAGATGAACTCATAACACCTTCCTGGTGTGGT
TTGTCTATGGGATAGAAAGGAGCTCATGGTGCTGTGGACAACTAACAGAG
GTGCCTGAGGGCTGGGCCCTCTTTGTGCCCCTTCTGGGGGTCAGCAAACT
CCTTTTATTCAGATATAAATCCCCTCATCCACAATTTCACCAGTCTTCCC
AATGCAGACCCCAAAAAACATCCCCAATGACAAAGTCCACGAACTGAGAA
AAGCAGCAAAAAGCCTCCCAGCCCCAAATATTTATCCCTTATCCCATTTA
TTTCTATGGGCAAAGCTATTCTAGGCATCAGGAAGGTGGGAGATTCCAGG
TCAGTTTGTTCCTAATTGTGATCTTTTAATGATGTTTCTCCCATCAGGTG
GACATTTGGAAGTGGTTCTGACTGGGAAGAGGACGTGATGATGGCATCAG
GTAGAGCTCAGAAAGTGGTATTTATCAGCAAAGCAATTTTCCAGGTCTGT
TTTTTCCCATTTTTCCCATATTTTTTTCTTATTCAGGGAAGAGGAACGCG
GATCTTGGTGAGTGATTTTCTTCCTTTTACCTTCAAAAAGTCCCTTTCCA
TGTGTAGAAATGGATATACGTACCCCCCACTGATACCCATTTCCTTTGTT
CTGTCCTTATATTTATACTTCCCCATATTTTGAACACATGAAAACAAAGC
CCACATTAAATAAATTCATAAACAGTGCAATTTTTGGACTATTATTTTCC
ATAGAAAAGTATTAAATCAGTGCAGAAGTGCCTCTGGAGGTGACTTCTGC
AGCACCCAAAGAGA[illegible]TCTCTCTTT

GAAAGAGGTTTATTTTCACAGTGTGGAAACTCAGATCCGTTGCCTCACCT
GCAGCGTGTATTTGCAGACACCCAAAGTGTTCCAGAGTTTGATGGTTTTG
TCCCTGGAGCCCGAAACGATCTGGCGGTTGTCGGAGGAGAAGGCGACGCT
CAGCACATCCTTGGTGTGGCCAACAAAGCGGCGGGTGGTGGTTCCTCTGC
AGGGACACCAGGAGGGTCGCACGGGAGGGACAAAGCTCAGCAAACCCCCA
TTAAATTAATTAACCCTCCCCTAAATTGAGGAGATCGTGCTGCAGTGCAT
AAATTCTTAATGAACACAACTGATGGAAGCAGGAAGGAAGCTAAAACGGA
GTCATCTCCACATGGGTTGAGGAGTGGTGGTTCCTTCCCTCCTTCCGAAC
AGGAACAAAAGGGTGCCAAAGCTTTTGATATAGGGTTGGAATAATCATGA
GGAGTTTAGGATATAAAACTCAGCTTCCGTGGACACACAGCAGCGTAAGT
GCTGAACGCTTTTGGAGGATTGGGGTAGTTCTGCTTCCTGAGGAGTTTCT
TCTCCTATAGTACTCCCAAAAATCACAGTGCAAGAAGAGCCGGTGCTGCT
CCAACCTCACCCCAAACTCTGTACCCCAAAATCACACCGAAGGAAAAGCC
TGCTTGCTCCAGTCTGTACCCCACAGCGATGGTGAAGGAAGAACCAAATC
CCCCCCTGCTGCTCCACSTGCTTCTCTCCCATCATAATTGCAGGACGTGT
CCTCAGATCCCGGAGGATCAGCAGACTGTGTCAGGTGTAATCACTGGGAG
AGTGAGCTGAGGGAGGAACCGCTTTGGTCCTCCCTCCAAGCATGATTTAC
CACCCAACCTGAGAGGAACTCACCTCATTTTCACGCTGTACCGCACACCT
CTCACCCACCCCAACACCCAAACAAAACACAGAGCCCAGTTCTGCCCCAA
ACCCCCACCCCAAAGCCCTTTCAGTCCCCAGGACTCACGTGGTGAGGTCC
CACAGCCTCAAGGTGCCATCCCAGGAGCCCGACAGCGCAAACTGCCCATC
GGAGGAGATGACCACATCGCTGACAAAGTGCGAGTGGCCGCGCAGGGCGC
GCTGCGGGATCCCGTAGTTGGTCTCATCTCGGGTCAGCTTCCACATGATG
ATGGTTTTGTCTGGGAAGGGGGAAAGGCAGCGGCCTCAGCTCCAACCCTT
CTCACATTCCCGTCCTCACTGGGCTTTATCTCCCTCATAGCAATGGGGGG
GTTACACAGAAGCACCGCACCCCTTCCTCTCAGCCCCCCAACCGCCTCCC
TACGTCCTCATACACAGCAGCCTCCCCACCCTGCAGCTCTCTGTCCCCGA
GCCCTGCACCCCATTCATCACCTCCCCTCCCCSAWGGTCCCCCCCAGCCC
CCTCNTYTAYCACKGACGGTGTCCCCTTATTTCCCACAGTCCCCTCCATA
GGCCCCACAGTTCCCTGCCCCCCCCCACCCCACAGTTCSGCCCCCCCCGC
CTCGGAMGAGGCCCGAACCCCTCAAGGCGCGGCCCTCACCCCGCGACGSG
GAGAGAATCATGTCCGGGAACTGCGGGGTGGTGGYGATCTGCGTCACCCA
CCCATTGTGGCCYTTCMGGGTACCGSGGAGGGTCATCTGCTCCGTCATGG
CGGCGGCGGGGCGGAGGGATGGCGGCGGATTCAATAAAGGGCCCGGCCCG
GTCCGGTCCTACCGCCCGYGATGGCCGCCAGCGCGGAAAGAGAAAGAGGG
AGGTGACTTCCGGCGGAAGCGGAAGTAGCCGCTGGGTTGTACGGCAAGAG
GGGCAACATGGCGGCGCGCATAGAGAGCACGCTGAATGGGGGAATGGGGC
TTTTGGAGGTGGGGAGGGAAGGTTGTTYTCTGCCGCTGCAGGRACACGAG
GTGCGGGCAGAGCACCTTCTTTAACATTTGKTATTATTTAACGTTTWACA
TTTAGCATTTTTATTATCCCTGTTGTGCCAGGACGGAGAAGAGCAGGGTG
TGCAGCCTGTGCTTATCACCTGCAGCTGTCCCTGCACCCCACAGCCAACC
CAAGTTTGTGACGCCTGAGCAGGATCTGACCCAGGAAGGCAAACAGAAGG
TCTGAGTCCTCCTCCCTTTCCTTTCCCATCCCTCCCACGCTGCAGTTTGG
GGGCTGTGACCCGTCCGCGTTGCTCAGTGCTCATTCCGATGAGCAGTGGC
TGATGGTGATGTTCACAAGTTTTTGGCATCCCTGTGGGTTCCACCCCCGT
TTTGTCTCACCAGCCTTTTTCTATCCGTCCTTATCAGCAGATCATCCTTG
TTATTAGATCTGTCTTTTTCCAGTCACGGCTTTGCATTTTCACCTTGGTT
TTACCACCTAACATCAAGCCTTTTGTCCCCATCTGATGATATTCATGCAG
ATAAATCCGTAAAGCAGGGAAGAATTAAATTCTGGCCCCTTCTACACCCA
TTTAGGTTTAGATCTT[illegible]CAGAGCCA
GGAATAACGTGTCTTGATGTGCCAACACACCTTGAAATCCAGAAAATTGC

```
GGCCTGGCACTTTATTTAGGGCCACGTAGGCCGGGGAGGGTGCAAAAAT
TGGGCAACTTCCACCTCTGAGGCTGCTCAGAGTGCAGCATCGCACCAGGC
CGCACCGGTGGGAAGCAGCCTTGTTTCCCCTTGCAGCTTAAGAGCTCTCT
GAGGTGGGGGTATTTATTTTCTCTTCCCTTTTCTCAGCTGCTGTTGAATT
TCCAGCTGAATCCTGTCCCACCAGAGAGACTCTGATTGCACCCTGTTGTG
TTTTACTTCTTTTTGTTGGTGGATTGGTATTTTTTTTTTTCTGTTGGCGTT
ACAGAGCTAGTTCAAAATATTTTTGGCTAAAATAAGAATTAAATGGAGAT
CTAGTTTTTTGAAATGTCAAGAAATAATAATAATAATAAAGAATAAA
GAATAAAGTTTTAAAGCTGAGCCTCTCCCTTATTGAGAGCCCCCAGGGGA
CAGGAGTTGTGGTGCAGGCCCCCCAGTCTGCTGTTAACTCCTGCTGGTAA
GATGTGACTTAAGCCTTGCATCGTTAATCTTAACTTAATTAGCAGTAATT
TGGATTGGGCTGCTTCCCTTCAGCAGCTTGTAAAGGGATAGAGGCTGCTG
GGTGAACTGAGCTCTGTGTTACCACCTCTCCTGCTCTCCCCACATGTTTT
TGGTGGTGGTGGTTGCTTCTTTTTGGCCACGGCTCTATCTCCCCAGGTGT
GCACTCACTGTGGGCTGCTACTGCTCCTGAAAGGGCTCAGGGAGACATTT
GAGTCCCTTCGTCCACACGTGGGAGGAGAGCACTGATGTCCCCATCCTTA
AAGTTGTGGGCACAGCCTTGGTGGCAAATCCAGAATGGGATATAATGCAG
CCATGAGCTCAACAGAGCGCTCTTTTATTGAGTTTTGTGCATAAAATCTG
TGTGTTGTTACCACATCCTCATCTGGTTCCAATGGTGACTTGCCACACCC
GGACGAGGTTATCTGTGTAGCCAGCAAACAGCGTCTGGGGAGAGAAATGG
AGGAAGTGGATCATGAAAAGATAGGAATCAGCCCTCGGTGTGAACGTAAA
AATCTCAGAAGGCAGCTCCCAAAGCGGAGGTGCTGGAGGAAGGTGGGAGT
TTTAAGGCTGCAGGAGGAGCAGTGAAAAGGGAAAGGAGAAGGGGATATTT
CTACCTGCCCATCTGCAGACCACGCCAGAGAGGTACACTGGGGAGGCTCA
GCTTTGCTGCTGGTGCTGATCACCTCCTGCTTCAGCTCATCCACAATGAT
TTTGCCTTCCAGGTCCTGTGCAGGACAGAAGAGAGCGTGAGGGACTAAGG
TCCTGCAGGGAGACTGCTGTAGCCAAACCCAACCATTCCAACTCAGAACA
GGCTCAGGGTGCTCAGAAACAGCCTCTGGGTTTCCGCACAGGGATGCAGT
CAGATGGCATCGAAGTTTCATCACAGCAGAGTGGTGGCTGTGCCCCACAC
CACCCTCCCAGTCCAGGGGATGACAGTGCCACCAGCATGACCCATCCCAC
GTAACCAAAAGGGCTCTGCACCAAGGCATCTGTGGGGCAGGGCGAGGATT
TCGACCACAACTCTGCCTCCCAAACCCAACAGGATAAGGGAAGTGATTCT
TTAGGAGGTAAATAGGGATGTCACATACCCAGATCTTGATGCTGGGGCCG
GTGGCAGCGCAGAGCCAGTAGCGGTTGGGGCTGAAGCACAGCGCATTGAT
GATGTCCCCTCCATCCAGCGTGTACAGGTGCTTGCCTTCATTCAGGTCCC
ACAGCATGGCCTGGCCGTCCTGGGGGGCAGCAAAGAGGAATCACAGCAAA
CCATCAAACCTGTGGCTTTGTTCCAGTTGTCCATCTAAAACCTTCCAGCT
TGGAAACAGCACTTGATTTGTGACTGAGATGTGGGTGAGTTGCCACAGGA
CAGCAAGAGGCACATAACTGAGCTGTGAGAACAACAGAATAAGCTGCAAT
TTGGCCTCAGCTTTCCCCCAGGGTGTACCTTGCCTCCAGAAGCACAGAGG
GAGCCATCAGGGGAGACAGTCACTGTGTTCAGATATCCCGTGTGGCCGAT
GTGGTTTGTCTTCAGTTTGCAGTTAGCCAAGTTCCAAACCTAAATGAGGG
TAAACGTGACAGGCTCAGAAATATGGAGGAGAAAAAAAACAACCCTCTCA
TGATCACTGCTCAAATATTCCCCAGAACGCCGCACAAACCCCAAAGGAGC
TGCTCCTCTCACCTTCACCAGCTTGTCCCAGCCACAGGAGACAATGATGG
GGTTGCTGCTGTTGGGGGAGAAGCGCACACAGGAAACCCACTCAGAGTGG
CTCTCGTCCTGAGGAGAGGAACAGCATTGGGTTGAAAGCAATGAAAAGCA
TCCCCAGTCCGAGCTGCTGCATCCCACTGCTCCCTGAGCCCCTCATAATT
GCAGGACGTGTCCTCAGACCCCCCCCAGAAAGAAAGGTCAGCAGGCACTG
TGTCACTTCTAATCATTAGGACCGAGCTGGCAGATGTGGATTACGGATCA
AAACCAACAAATCAAAGAGAAATGGGGGAATACGGACTCAGAAACAAGCA
```

GTGGTTTTTGAGGGAAAATGCCGGGGGGGGGGGGGGGGGGATATGCCC
TGAGAGATTTAGGGTCTGTTTTGGTAAGGAAAGCCTCCAGCAATGTGTGG
GCTGTGTCTTTGTTCTCTGTGGGGAAGGGAATCATCCAGGCTCAGTGCTG
AGTTGTGGCTGATAAGAGGATTTATTGGGAGCAACGGTGGGATTGGTATC
AGTCATCCCTAATCCTTTCCTTCTCTTTCCCACCTTGCTGCCTCCTTCCC
ACAGGACATCAAGGGCACTTTTATCAGGTCAGTGACTTTGTTTGCATCTT
TTCACTTTGAATAACTTTTCTTTTTTTTAATGTCAAAAAAGCATTTGAGC
TTTTGTTTTAAATCCTGTGTGATGGGTACAGTTGGGGCCTGGTAATGCAG
GGGAAAGCTGTGTCCTAACTTTTGGGTGATGGAAACTTCTGGCTGATGGG
GTGCAAATGGGATCTGGGGAACAACTTGGGAAAAGACTTGGGAACTTGGG
AAACAACTCTGGGGCCATTTGGGAAAGGGGAAGGGTGGGGAGGAGATCTC
GGCCCTGATTTCTGGAAGCGTGGGTGTGCCCATGCAGACCTCATGCTATA
GCGAAACTCCTCACTCTGGAGAAACGATTCTCCCCATCCTGTCAGACAAA
TGGGCAGCGCTGGGAGTTCTCAGCCATGCTGGACGCACGTGGCTCTACCC
CAGCTCTGTCTGCTGGCTGAGGGAGGGTGGGGGAGGCTGGCTGCACCAGT
GCAACCAGTTTGGCCGATCCATGCGTTGCTCTGGTTTTTCCAGAGCTGCA
TGCAGGCCGCCTCACTTCTTTTCTGCTGCTGAAATTCTCTGCTTTCCTCC
TTTCCCCCCACCCAAAAAAGATGTGAGAACATCAAATTCCAGGAGCCCGA
GATGGTGCTGGTGGACGTGGGGAAGAAATACCGCAACTATTTCCTGCAGG
ATGTGGTGATGAGAAAGATGGAGAAAGCCTTCAGCAAAGTTCCACAGGGT
GAGAGAGTCCTCTTCCTTCTACGTGGGATGGGGTTCCCTCCACTTGGGAT
GGGATTTCTCCAGCTCTCTTGGGGTTCTCCTTCCATCTCTGTGCTCCCAT
GGTTTGCAGCCTGATGATCCTTTAGGAAAAGCAGCATCCCTCTGTTCTCT
CTGTGCTTTTCCCTTTTGCCTTGTCCTGGGTTTTCCCCTATTGTAGCTCC
TCCATAGAACTGGGGTTGATGTGGATCTGGATTCATTATAAAGGAGGGAT
GACTGCCTCAAACTCAGCATGGTGCAGATACGCAACCAGATGAGGATTTA
GGACTGGGGTGCAAGGGGGAAAAAAGTGCCAGGTGACCCCCTAACGACCC
CCGCTCTCTGCCCTTCCTTCCAGCTGACATCACGCTGGACCCGGACACCG
CTCACCCTCGCCTCAGCCTCTCCCTGGACCGCCGCAGCGTTAAGCTGGGA
GAACGACGCCAGGAGCTCCCCAACAACCCCAAACGCTTCGACTCCGATTA
CTGCGTCCTGGGCTCCCAGGGTTTCACCACAGGCCGTCACTACTGGGAGG
TAGAAGTCGGGGGCAAGAAAGGTTGGGCGGTGGGGGCTGCACGCGAGACG
GCTCGACGCAAAGAAAAAACCATGGGGCCTCATCAAAAAAGGGAGATCTG
GTGTGTTGGCACCAATGGGAAGAAGTACCAAGCGCTGACGGCCATGGAGC
AGATGGCTTTGTCACCCAGCGAGCGGCCCCGGCGCTTCGGTGTCTACCTG
GACTATGAACGGGGTCAGCTTTGCTTCTACAACGCTGAGAGCATGACCCA
CATCCACACCTTCAACGCTTCCTTCCACGAGCGCATCTTCCCCTTTTTCC
GAATCCTGGCTAAGGGCACTCGTATCAAAATCTGCACCTGATGGCCCTCC
AGCTTCTGATTTTTTTTTTCCCTTTTTCCCCCCTGCCTCATCCTTTGGGT
CCCACTTTGGGACCAGACGCTGCACTTGTTGTCTCGCACCTGCTTGCTCA
CAAGGCCTCTTCCCTCCTCTCTCCTGTCCCAGCCTCTGTCCACGTCCCAA
CTCTTCTCCGGGGTCGCGATCCCAGGCTGGTTTGGTTTGGAGAAGGGATC
CAATCTCCTTGCTGGAGGTTTTCCCTTCAGCTCTTGGTGCTATGGGCTCC
CCTCTGCCTTTCCCAGTCCTCGCAGCAGCTTTCCAGTGTGCTCTTCCCCG
TTTTGTTTAAAGCCTGTGGTCGAGCTTTGCGTTGTTTGCCCTCTTTGGAT
GCAGAGCTCGAGCTGAGGATGCTGGGGTCTGTACATTGTGACACGAGCAC
TGCTTGTGCCCTCTTGGCCATTGCTTTCTGAAAGTCACTCAGATGCACCA
AGGAGCCTCATTTCTTTTTATTTTTCAGTTCTGGGGCACAACCCTCTGCC
CACCTCCCACCCAGCCACCATCTGGACCTCAAACCTTCCACGTTCTCCTA
TTCTGCCACTTGTCCA[illegible]TGGGGG
TCTCCAGCTCTCCCTCTGCCCCATCATTCCCTCGCCAACCATTTCTTGTG

AGAGGAGGAAGATGAGCTGGGGGAGGAAGAGCTGGACGTGGAGCAGGAGG
AGGAGGAGGAGGATGGAGGCGGGGAGGAGGAGGAGGAGGACGACATGTGG
AGCGAGGAGGAAGAGGATGGAGAGCTGTGGGAAGGTACTGGGGGTCGGTT
TGGGCCTGCCCTGTTGAGTGTCTTTATGGATGAGTGAGGGAATTGGGTGC
ACCCTCAGTCAGTTTGCAGATGATGCTAAGCTGGGGGGGTGTACTGATCT
GCCTGAGGGTAGGACGGCCCTACGGTGGGGTCTGGACTGGGCCCGATGGG
CTGAGGGCAATGGGGTGGAGTTCAGAAGGACCGAGTGCCTGGTTCTGCAC
TGAGGTCACAACAACCCCATGCAGCTCTACCTGGGGTAGAGCGGCTGAAA
GCTGTGTGAGGGAAAAGGATTTGGGGGTGAATATGAGCCAGCAAGAGGCC
AAGAAGGCCCATGGCATCCTGGCTTGTATCAGAAATAGAGCAGCTAGTGG
GAGCAGGAAGTGACTGTCACTCTGTACTGGCACACCTCAATGCTGCACCC
AGTTCTGGGTCCCCTCTCACTACAAGAAAGACATTGAGGCCCAGTGAGGA
TGGTGGGGGTTGGACTCAATGATCCCTGAGGTTTTTTCCAACCTTGATGA
TTCTGTGATTCTCAGACCCCGTGGAAGAGGAGCTGTGGGATGGAGTGGTG
CAGGGAGAACTCTACTTTGGGGACGATGATTATGATGAGGATGTGATGGA
GGAGGATGTGGAGGAAGAGGAGGAGGAGGAGGATGAAGCGCAGAGCCCTC
CGCCCCCTGTCCTGCCTGCCCGCCCTCGCCGCCTGCAGACCTTCACCTGC
CCCCAGTGCCGCAAAACCTTTTTCCAGAGGAATTTCAGACCCAACCTCCA
GTTGGCAAACATGGTGCAGATCATCCGGCAGCTCCACCCGCACCCGCAGC
GCCTCGCGCCGCCCGCCGGCCCCTCAGCCTCAGGGGGTCCTGGGGGGAAC
CCAGGGATCCTGGTGGCAACAGGAGGTCGGGGGTGTCCGAATCTGTGCGA
GAAGCACCAGGAACCCCTGAAGCTGTTCTGTGAGGTGGATGAGCAGGCGA
TCTGCGTGGTGTGCAGGGAGTCACGGAGCCACAAGCATCACAGTGTTGTG
CCCCTGGAGGAAGTCGTGCAGGATTATAAGGTGGAGTTTGGGGAAGGGTC
ACGGTGGGATAGTGGGTGAGGTGGGGTTTGGGGAAGGGCTGTGGTGGAGA
AGGCGGGGTTTGAGGGAAGAGTTATGGGAGAGTGGAGGCTTGAAGGGAAA
GTGAGGTTGGGATCAAGCTAGGTTCGTCTTGCTGAGCTGGTTGGGTTGGA
GGCGTGGGAGGCTGGGAAACCACACACTGCAATGAGGAGGTGGAAGGGTC
TGGGTACCCATTTTCTGCTTAAAAACACCTTCCCAGCACAGTTCCTCAGA
GAAAGCAAAAGGGAAGTGGCGTGAAAGTTGGCTCTGAGGTTCCGTTTTCA
GCTCTGCCACCAAATTAGGGACAAAAAGAGGCGATGACAGAGGGGATTGC
CCCAGGCAGGGTTTGCTGAGTTGTGTTTCCTTCCCTCAGTACAAACTCCA
GAGCCATTTGGAGCCACTGAAGAAGAAGCTGGACGCGGTGCTGAAGCAGA
AGTCGAATGAGCAGGAGAAGATCACAGAGCTGAGGGTAAGAGCTGAAGGT
TTCTGTGCTTCATAGAATCATACAGGAGAACCATCAGGGTTGGAAGAGAC
CACAAAGATCATCAGTTCCAACCATCACCGCTGCTGGGAGTGTGCCTTGG
TGGCTGAGCAAGGAGAGAGAAGCTTTGCTGCTGCTCTGAGCTCTCACGGA
GGCATCATATTCCCTTTCCTGCAATTATTGGGCTGTGAGGGCTTGGAAAC
GGTTTCCCAGTTGAATTAGAGCTTAATGAGAGCTTTGTGTGCCTCAGTGT
TGAGTGGGAATTGGTGGTTTGGGAGCTGGTATTCCTCATTTGAGTTGAGG
ATGCTCTACATCTCTAAACCTGTGCAGACTTTGCTCAGTTCTGTCTGTGG
TGCATTCAGGAGATGCGTAAGCTTATGGTGTGTGGTGAAACTGAGAGAAG
CATAGCACAGCAGCCCAAAAATGAGCTGATCTCTCACCTCCCCCTTCTGC
AGCAATTCCCCTAATGCTTTTCCTCCCTCTGCAGGAAAAGATGAAGCTGG
AAATCAAGGAATTTGAGTCTGATTTTGAGCTGCTCCACCAGTTCCTCATT
GGGGAGCACGTGCTGCTGCTGCACCAGCTGGAGGAGCGCTACGAGAGCCT
GCTGGCCCGGCAGAGCAGCAACATCAGCCAGCTGGAGGAGCAGAGTGCAG
CCCTTAGCCGCCTTATCACGGAGGCAGAAGATAAGAGCAAGCAGGACGGG
CTACAGCTGCTCAAGGTCTTCTTCCATCCCTTTCCTTGTCTTTATGGCAA
AGCGATAGCACGATGGTGGGAATAATGCTCCAGAAAGCTTCTGTGTCATG
AGAGAGTGCCTTTAGTTGGTGGGCTGGGTGCTTCTCCACCCCTCCTTGTG

AAGATAAGCACTTGGTGAGATTTCCCTCATAAACACCCCAAAACGGCGGC
CCTGGGGTGTGTTTCTGTATTAAAGAGCCCTCAGTGGAATGGTTTTTGCA
GGGCTGTGGTCGAAGAGCAAAGCATCAAAGGAAGGAGAGGGCAGTAATGT
TGCAAAGGGCTGACGGCGGTGGTTGCAAAGAGGGAGGATGGGGGGGGATG
CGCCAAGCAAAGGGTGGCGTGGGTTCACCCGCAGGGATGCACTGCGCCCT
TGGCTCCGGGTTTTGGGACCGTACCTTGTACTCCTGGGCCGCCTGGTGGG
CAGGGAGCACAGCGTGGGAGCGGTGCGCCTGGGACGCGTCGCACTGCGCG
CAGATAGGCTCTTGGTCCTCTGTGCAGAAGAGCTTCAGAGCCTCGCGGTG
CTGCTTGCACCAACCCGAGGAATGCAAACTCAGCTGCCGGGCGATGCTGG
CGATATTTGCCAGCTCTCTGCTGGGGCGGAAATTTTTGTGCAACGCCGTT
TTCCTGCACTGCGGACAGGGGAAATTTCCCTCCAGCCCTTCCCAGCAGCG
GGCGATGCACTCCCGGCAGAAGTTGTGGCCGCAGGGGATGGAGACGGGAT
CCTGGAAGTAACCCAGGCAGATGGAGCAGGAGGCTTCGCTCTGCAGGCTG
TCCAAGGGGCTCTGCGTGGCCATGGGCTTCCTGCTGGGCTCCGATCCGCA
GAGGGAATAGGGGACCTTTCCTCCTTATCTCCTCGCTGATAGGAGAAATC
CGGCCCCGGAGGCTGAGCCTGAGCCAAACAGGGCTGGGAGAGCTCAGCCC
ATAGGGGATGCTGGTGGGAATGGGGGCAGCTCGCGGCTCCCCAGCACGGA
GTCACCAAACTGGGGGGATCTGGGGGAAATTCGGAGGAAAAGTCAGATTT
TGTCCTCTCCTCGAGCAGCAAAGAGGGCAGGGGAGGCGATTTTTCCCTTC
TGTGCGATCACTGTAAGGAATTTCCAAAGAAAACGCATGGAGGTCTGCTT
GTTGGGATGGAATATAGACGTATATTGGAATAAATACAGGAAGACGTTGG
AACATGGAAGGCACTGAGATATAAGCGTGCTGTGTTGGATATGACTCTG
CTCGACTAAAGTGAAGGTGGTTTTAATAGCACTGCTCAGAGCCAGGCGGG
TTTTGGTGTTGTTTGGGGGGAATTACGTGGGTTTGGAATTGGGAAATATG
AGACGGAAAAATAAGAATAATGGAAGCGCCCAACGTGGGGCTCGAACCCA
CGACCCTGAGATTAAGAGTCTCATGCTCTACCGACTGAGCTAGCCGGGCT
GATGGGCACGCACCCTTCTAAGCAATACTTCATGGTGATCCTGCGGAGGG
GTGCTAATAATTCTACCTAATTATTTTGTTAATTATCCCGGTAATTATGG
GTTCTGAGCAATCGCGAATCCACGGGGAAGAGCTGCATGGGGAAAAAGCA
CCTATCCCTACGGGAATAGCCGGGAACTGCCCGGCAGTGCTGCAGGGCGG
GGGAAAGAGGGGAAAAGCAGGAAAAAAATGGGCAAAATGGAACGTTTAAA
AGTGGAGAAATTAACAGTGAAAAAAATGCAGGAAGCGTAAAAGTAAAGGC
TGTGTTTCTGCCCGGTTTCGAACCGGGGACCTTTCGCGTGTGAGGCGAAC
GTGATAACCACTACACTACAGAAACGCGCTGAAGGCCGCTTCGCCGCACG
GAGATGTGAAGGGGCGAATGCCGGGGCTCGGTGCGGAGTTTGCAGATAGG
GGCCGCTCCGGGCCGCTCCCGCGCCGGTTCCGGTGAGCACAGAGTGCAGC
GGGTGACAAAATGAAGGGAAAAATGTAAAACTGATGCTCCCGAATCGAGG
CTCGAACCGCCATTGTCCGACTGACAGCCGCGCGCTCTACCGACTGAGCT
ACCCGGAGACAGAGCAGCCGGAAGTCACGCCCCCGTAGAGCGCCCACCCC
GTTGCCTAGTGACAGGAGCGCCGCTTCCGGTCAAGTGATGAGCGGAGGGG
GCGTGGCTTGTGTCAGATAGGACGGAAGTTCCGGTCAGGTGGTACTGGAA
AGGGGGCGTGGCTTGCGGCAAAGGGGACGGAAAGCGGAAGTGCTGCCGTT
GGTTGGCGGAGTTCGCACCATAGAAGAACGACGGCGGCGGTGGGAGGGCG
GGAGGTAGAGCGGTCCCCGGGGAGAGTGCTGACGGGAGCGGCGAGGCCCG
AGGAGGGAGCGGAGCTTACGGGGGAGTGCGGAGCCTCGAGGCGGGTCCCA
GCGCTTCGCTGTGGGGCAGGAGAAAGGCTTCGGGGCAGGAGGAAGAGGGC
CTCCSGGCCWSSCSATGGAGGCGGTGGGCGACGATGGGGCGTCGTCGGGG
CGGCTGAACCCGGTGGAGACGCTGCAGGAGGAGGCGATCTGCGCCATCTG
CCTGGACTACTTCGTGGAGCCGGTGTCGATCGGCTGCGGGCACAACTTCT
GCCGGGTGTGCATCGCGCAGCTGTGGGGTGGAGGAGAGGCTGAGGTGGAG
GAGAGCGGCGGGGCC[illegible]AGCTGGAGGA

AACACGCAGGGCTCGAAGCTGAACCTCTCGGGGTTCTCGGGGAGGTCCTG
TGGCACCAGTTGGCCCCGGGCTTGTTTTCGGTCTTCAGAGAGATGGAGGT
TGGGGTGAGCGGTGGTGGGGTCCATGGTGACGTTGGCTGTGGGACATGAG
GGGGAATGGAGGTAGGATTTAGGCTTGGGGGGAGCTGGAGAGGTTCCTCT
TCCTTCTGTCCTTTTCTCTGGGTGCTTTTGGACATGGGCTGGTGGTGGTG
GTGGGTTGATGGTTGGGCTGGGTGATCTTTGGGGTCTTTTCCAACCTTTG
TGATTCTATGGGGTGTGTGGGGCTCCACCAGCCTCAGTGTCCCCCAGTAG
AGATGTAGGAGAATGGGGAGAGGACAAATTTTAGGGCAGCATAATGCGGG
AGGGACAAAGACATGGGAAGGGGACAGCTTGACATTCACGGAGGGGAAGG
GGAAGCACAAACACTGTTAGGTTTTGCCTTGAATCTGTTACTGGCTTTGT
AGGACCACCAGCATCAGGATGCTGTCCCCATTCCCTCCCTTCCCTGTGGG
ACTGCGTTGTTTTTTCCCAAGAAAACCACTCCCCACCCCACATCCACCAC
TGCTGACATACCTGGCTCTTGCAATTGAAACATCAGGCTGTCTGAAAAGG
AGAACAAATTCACTGCATTGGGTTTATGCTTCAGGAAAAGGGGCTGGGAG
ATGGGGAAGGGAAACCATGGGGGTCTGGGGGCTTCGCAGTGCAAAAGCTC
TGGGTTTACTGCAAGAGCCCCACGACCCTCCCAGACCTGGAGGAGACCCC
GACCCCATTCAGTACCTTGGCACTTCTGCAGCGTCAGTCTCACCAGGACG
TTCTTCTGAAGGAAGTCCTCCAACCTTCTTTCCAGAGTGGGGGAAATCTC
TGCTGGAGGGCTGAACTTCATCATCTCACAGCTGCAAAGAGAGGAGAAGG
GTGGGGATGGGGGGACTGTTGCGTTGGTTGGTTGGCTGTTCATTTTATTC
TCAATAGGAGAAGCTATGGGGTGAGGATATTTGCACAGGGACGAAATCCC
TTTCCCCCCTGGGATCCCTCTGCCTTGCAGCCCTCCCCCAGGGTGCCATC
CAAAAATCAGGGTGACAATAGGAAGGAGCCATGTTACCTATTCAAGAGCC
TCCTGATGTCCTAAAGGTGGGAGGAGAGAGGAGAGATGGATCAGAAGAGG
AGCACCAAGGGCTGCCCCTTCGTATGGCAATGCACAGCAAAGACCACCCT
GCCCACGGTGTGATCCCCCCCAGCAGCAACACAGGGAGCTCCCATGGGGT
TGAGTTTGGGTTCTCAGGGTTTGCTCTGTCCCCCCATTTCCCACCACCCC
TTTGGGTTCTCACCAGCAGGAATTTGCTGTCGGGCTGCTGGAATTTGCCC
TCCATCTCCCAGATCAGGGTGTCAAGGTGGGACATCTCCTCCATCACCTT
CGTCACCGCATCCTCCTGTACTTTGGTGACGGCTCTGTCCAGGTCTGCCA
GCTGGACCAGCAGGAAGCGCTCCTTCTCCTTCAGAAATCGCTGCAACTGC
TCGAATTCACACACTATCCTCTTCCCTTCCTTCTTGGTTTTCTCCTGTTG
GGATGAGGGAGAAAGCCAATGGGGTGGAATAGAGGCAGGAAGACCCCCCC
TGGGGTCTCAGGATGCCGTGTTCTGGGGGATATCCAACCAAAACCAATGG
GGATGTAACACCAATGCCAATGGGAGCACAACACTAATGCCAATGGGAAT
TTATCACCAGTGCCAATGGGAACGTAACAACAGCGCCAATGGGAACGTAA
CACCAGTGCCAGTGGGAATTTATCACCAGTGCCAATGGGAACTTAACATC
AAAAAGCCAAAGATCATCTTGCTGGGCATTTGGGAGCAGCAGGAATTTTT
CAGGAGTTTTATCCCAAAAGCAAAACCAAAGGAGGGGGTAGGAGATGAGC
TCTGTATGAGGGATATTTACAGAGTTTAGGAGGATCTGCTACGTTATCTC
TTTAACACAGGGGTTCCTGCGTAACCCCAGCTGATAAACACAGCCTTAGC
GCTTTCCCAGCCCAGCTGCGAGCCAAAAATGCATGATCTGCCCCCAAAAT
ACACCAAAACAAACAGGACAGGGCGGAGGGGAAGGCAGACACCTCCCCTG
CTGCACCCACCAAATACAAGCCCGTCCTTCCACCAGTCCTTCTGCTTTCC
AGGTACTTTTCCCTCTCCTCCTTTGAAGCCTGGAGGCGAGCCTGAATTTC
TTCCTGTGCCAAAAGAAGAAAGGCGGAAAGCCTGTTTTCCCACTTAAACT
GCTTCTGTCAGATGGGAGAGGCTTTGCTAAAGCCTGGAATCCTCTGCAAG
GTGCAGAGCTGGGCAGAGGGAAGCTCTGTGAGCACGGTGTGCTGCTCTGG
AGCTCTGTGCAAGCTGGGAGTATTTTGCAGAGAGAAAAGAGGGGAGAAGG
GAAGGAAAAACACGAAGTTCGCTGGAAACCTACAGAAAAACGCTGCAAAAG
TGCAACAAAAAAATCAGCACTGACAGCTGCGCAAGGAGGTGTGGAAGGGC

CAAGAAGGGCTCTGTGTTTTCCTGCCTGGAATCTGAGCCCTCCCTACTGG
GGCTCGAGCTTTCCTTCTGATGCAGAAAGTGGAAAATAAAGAGCAGTGGGA
CTGGAAATACCAGGGGGGACTCATGAGTGGCATCCCCCACTGGAGGAGCT
CAATGGTGAGCTGGAATCCTTGCTAAGTTTTATCGAATGTGGGGGACAGG
AGGAAGAAATCAAACTCAAAAAGTCATGAACAGGTGGCTGTGAATTCGGG
GCAGAAAGCTGAGGGCCCTAAAAGCACAGGAGGCAAAAAGGATGGAGAGA
AACGACCCTACTGATGACACATCGCTGCCCAGCAGCTGACACCTACCAGA
TCCTCCAGGTTTGGGCACTCCAGGGCGCTCTTCTTCCTCGGAGACTTTCT
CTCTCCTCCTTTGGAAACCCCTGATATCCCTCTGAGTTTCTTCCCCAGTG
AACCCACAGAACCTGTTGTTTTCAGCCCTTTGATGGGGTTGGGGTTTTCC
CTTCCTGTTCCTTCCCAGTCTGGGGTAGAGCTATGGGATGGCTGCGTTGA
GCCTGCAGGTCTGCTCCTGGTGGCACCCTTGGCAGGGCGTGCTGGGAGCT
CTGGGTTTGTCCTTTGTCTTTCTCCCAGTTCCTTGTCCCGGGGAGATGCT
GAACAATGTCACTTTGCAGATTTTGTCAGCTTCCTTTTAGGATCGAGCCA
TCGGGAGTGGGGTTAGGGGGTGTATATGGGGAAACCATAAGGAAATAGGG
AAGGAGATGCACAGCCGGATCCTTGTGGGGATGTGGAGGAGCACAAGTGA
GGATCTTTGGGATTTGAGTGCTCTCTCAGCCCAGCACTAACACAGAGCAC
TCACAGCCCTGGCTCTGAGCTCTCGAGGAAACATTTCCAACCATTTCTGC
CCCACTGTCCTTGTGTTGAGCCCCATGGCCAAATACACATGCCTAGAAAA
TAAAGCCATGCATTACATATGTATTTAATTTTTGCGTGGCAACCACTGAG
ACCCAACTGGAGGAGATAACTGCCATTCACTTGGGCAGGTTTGCAGGGGT
GAACTGCACTTCCAGCAAACCCTCCCTGTTGGGAAGAGCCACAGGGATGG
ATGGCACTCTGGGAGCTGAAGAACTGGAAGCAAACTCCCTGCAACCGCTC
CCCTGGGGCACAGAGCCTTTCATCCCAAAATAAGGCGTCCATCATTGAGC
AAATGAGTCACACCGTTGGGCAAACGACTTGCATTGCATCCCGAAAAGCA
TTAATTGCAGAGCCTGGAAAACTAGCTGGGCTGGAAACATCTGCATTGCA
GATCTACGGAGCAGAATAGACCCTGAACAGATCCTTCACCCAAATTCCCC
AGCAGGTGGGACCAAATGGCAGCGATGCGTGGGGCTGAGGAAAGATACCA
ACACATCAAAGAGCAATATTGAAATTTCAGCTGTAGGTTTGACCTTTGGA
GGTGGTGAGGTGGGGCTTTGTCATGGGATACCCACTCATATCGCATCTGC
TATTCTGAGCCTGATGTCGCCTGCTCCCTCCCACCCTCTTTTAGTTCCTC
TTCTTGGTTCTACAATCACCAACCTGTGTGTATTTTGGTGCTGCCTGTTC
CTCTTTTGGGCTTTCTCAGAAGAAAATGGGTTTTTGAGGGAATCCATTCA
GGTGAGTCCTCACCCCAAGCAGCTCTTCTTCACTTTGTTGGCCCAAAGCT
GACCCAGAGCCATACACCCAAAGCAAACCCAGAGCCGTACACCCATAATG
AGGCAGGAAGTGGAGTGTGCAGAGCACATCTTTTAATTAAAATTAACTAT
CAGAAACGTAGGCAGAGACCAGCTCCCCACACCAGGCGTTGCTATTTGCA
GTGAAAGGCCGCATACCTTTGCAGGACACCCCAGATCTGCCCCACGATTG
ATGTCAAATAGATGCATAAATTTCCTTCCAAGTCTTCAGTGCTCTCTGGT
GGTTTCCCCACCCTGCAGAGGGACCGCCCCGGGGCTCCCAATGGGGACAG
ACACAGGGCAGAGCAGCGGGTCCCCTTGGCACATTGCTCCAAGCAACCAC
AGCACACATCCCATCAGATGCCCCTTTCATAAAGGACATCTCAAGGACAG
ATCTTTAGGGGAGATCTAAACCCAACCCAATCCAAATGGGACATCAGCTG
CCCACTCGTGGACTGCTCCTCTGAGGGGGGATTTTGGGTGATCTCTTGCA
AGCGAGCCCCCAGCCCTATCTTGAACAAGGGGAGGACCTTCTCCCCATTG
AACAAAGCCCTGGTGTACACCAAGATGGGGGTGTCATCATCCGAGCTGAA
GAATGCCACCCGACCCCCTTCGTAGTCCAGGGAGACCCGAATCCTCCTGG
GAAGTGCATTCAGACGTAGGTTGGCACGGGGAGACGTGAGGGAGTGGTAG
GCCTCCAGCGCCCAGACACCCTCTTTGGGGCTGAAGCTCATGGGTCCCTT
CCTCTTCATCGAAGC[illegible]CCCCTGTC
CCACCTCCACCTCCCAGAAATGCCTCCCCGAGGTGAAGCCCTGGCAGCCC

ACAAAGATGAGCCCCCCTTCATCAGCATCAAAAAAATGCCACCGTCCCTCC
AGCGTAGTCCAAGTGGACGCTGACCCTCCTGGGCACCCAGCGCAGAGCTA
ACAGGGTCACCTTGTGGGTGGTGAGTGCCCGGACCTGTCCCCCCCATTTC
TCCACCCCCCAAATCCCCCCTTTGGGACAGAGGCTGAGTTGACCCTTCCG
AGGGATGGATTCTCGGGCCACACCGATGGCCCAGTCCCCTTCATCCCCCA
CTTCCACCTCCCAGCAGTGCCGGCCGGCAGAGAAGCTTTGGTGGCCCAAA
ACAAAGGGCCAGTAGGCGAATCTTTCGGGGTTATCAGGAAGGTCCTGTTG
TCCTTCCCCACGTTTCACACTCTTTCGGTCTTCGGAGAGGATGAGGTCAG
GGTGAGCGGTGTCGGGGTCCAGGGTGATGCTGGCTGTGGGGTGGAGAGGA
TGAGGAGTGTAAGGTTTGGGTCCTCGGTGCTGAGGCCATGAGGATGCGGA
GAGCTTGGATCTCCAGCACTAAAGGAGTTGGATGTGCTCTAGATGGCCCC
ACCTGAGTAGGGTTGTAGGGTGGGACCGTCCCTTCCAACCTCAGCCATTC
TGTGGGGCCATGGGTTGGCATCGGAAGGGTAAAAAGTACCAAAGAAGAAA
GTAAAAAGGTGAGAGGTGGAAACCCCTCTCATGTGCCCGTGCTATATGAC
AATAAAAGTGTTTTGAGCCCCCAGAATGCCCAGAAATAAAGGCGTTTCTG
CAGACCTTCTGTTCCATTGGTCAAAAGAAATGGTGAGGGGAATAAAAATG
GAAGGAAGGAGATCTATGGGATATTACCTGCAAAGTCTGCAGTGCTTCAT
CTCCTAGACCAACCCGGACCAGTTCAGCCAACCCCATGGTTTAAAAAACA
GAGCTGAAATCTGAAGGCAGGGATAATGAATGAGTTCAACCCGCTCACCA
TATTTGTTTATGGGAAATGGATATTTATCAAGGCGAGGGATCTGCCCTGG
GGCCATCATCCCAAATTACAGCCAGACTCGGCCTGCAGGGTGAAGAAAAC
TTGTTTGGCTGCCCTGATTTTTGTGTATTCCTCCCTCGGCATCTATTTTT
GTCCATTTGGGTACAGCCTATGGGTCCAGGCGCGCCTCCATCTAACAGGT
AATGCGGCTTTAGGTTCTCATGCTCAGCAAAAGGCACTTTTAGGAAAGGT
GAAGCTGGAGGGGTGCAGAGCCGGAGAGCAGCCCGTCCTTCACCCCTGAG
CACTTCTCAGGAATTACAGCAAAACGTGTAATTAAGAGTGGCAAACGGGG
TATCGAGTCCTTCGGGTCTCAATTATTTTCCTGAGTGGGAATAACCCGTT
GCTCTTCCATCTCTCTGCATTATTCTGCTGCAGAACGAGTGATGGGCTGC
TGGTTTTCACCAAAATACCACCATTTCCCACCCGAAACCCTTCTGAGTAC
CTTGAAGCCTCTTCAGGGTTTCCTTCAGAGCACCGTTCCTCCATGAGGAA
TGGCACAGCCTCTCCTCCGGCCCTGGAGAAGCGCCCGCTGGCAGCTGGAA
GGTCACTTTTCCACACCTGGAGGGGAAATAAATGCATTTTCAGGTGGTTG
TATCACAGAGCATGCCATCACTTCAGGACAGCAGAGGCCAGCACACGGCG
GCCATCCCCAAAATACCCTTCAGGGCTCGCAGTTCCCCTGGAGCAGAAGA
GCATTCATTGATGAGCTTTCTCCTCCATGGTCACTGCCTGATGCAAAGCT
CACAGAACAGCTTTTCAGAGAGGCCACATACCTGGTGATGGGGCTTTTCA
CATCCTGGGGACAGAAGAGAGGAGGGGGAGAGGAAACTCAGGTCAGTGCA
TGACCCATTTTGTCTTTAAAGTATGGAAAATTGAGCTGTTTGAGTGGGGG
TGGACCTCTTGGGTCTTCCAACATGTGCCCAATTTTGACTTTAAGTCATA
GAAAAAGTGAATTGTTTGACTGGGGATGGATCTGTTGGGTCTTTCAACAC
ATGGTCCATTTTGTCTTTAAATCATAGAAATAAAGAATTGTTTGACCAGA
GATGGACCTCTGGGGTCTTCCTCCACGAGGAAGGTGAACCAACTGAGGAG
CATCCATGCACGGCAATGAATCCTGCAGATCCACCCCACTGCTGCTCTCC
CAACCCAGCCGTGGATTTCCCCTCTTAAAACAGACCCCATGAGGACCTTC
TGCAGTAAGGTGAAAATACTGGGAATACTGAGATGAGGATAAAACGGTGG
GGGGAAAGAGGAGGCTGCAAACCTCCATCTCCTCATTGTGGTGGGGGTTT
CAGGCTGATGGAACGGCATAAAATGGGAGGAAAACACCCAATTAAGGCAC
CATGCAATTGGTCGGGGTGGGGAGGACATCCCTAAAGGACTTTTCCCCTT
GAAAAAGCTTCCCTGGAGGAATTCACTCACCGACTGCTGGCTCTTCTCTC
CCTGTGCTTTCGTATGCAGCGGCGCAAATCTCCTCCGAGTGCTTGGCGGTG
CTTTTCTGCCTCTTCTCAATCTCATTTTTCAGGTCTTCCAGCTGCCAGAG

```
TCGATCAACGTTTCAATGTTGGTATCAACACCAGGTTTAACTTTGAACTT
ATCGGCACTGACGGTTACCTTGTTCTGCGCTGGCTCATCACGCTGGATAC
CAAGGCTGATGTTGTAGATATTGGTCACCGGCTGAGGTGTTTCGATTGCC
GCTGCGTGGATAGCACCATTTGCGATAGCGGCGTCCTTGATGAATGACAC
TCCATTGCGAATAAGTTCGAAGGAGACGGTGTCACGAATGCGCTGGTCCA
GCTCGTCGATTGCCTTTTGTGCAGCAGAGGTATCAATCTCAACGCCAAGC
GTCATCGAAGCGCAATATTGCTGCTCACCAAAACGCGTATTGACCAGGTG
TTCAACGGCAAATTTCTGCCCTTCTGATGTCAGAAAGGTAAAGTGATTTT
CTTTCTGGTATTCAGTTGCTGTGTGTCTGGTTTCAGCAAAACCAAGCTCG
CGCAATTCGGCTGTGCCAGATTTAGAAGGCAGATCACCAGACAGCAACGC
GCCACGGAAAAACAGCGCATACAGAACATCCGTCGCCGCGCCGGACAACG
TGATAATTTTATGACCCATGATTTATTTCCTTTTAGACGTGAGCCTGTCG
CACAGCAAAGCCGCCGAAAGTTAACGGTTTGCCCAGGCTCACAACTGAAA
GACTTTCTACGGTGTGCGCGTGCGATGCGCGTAGAAGACTGATTTATCAA
CCTGTCTTTATATCAGGATTCATTACCTGACTATTTGTGGGTAAAGTTCG
TAGTGCGCTGATCGTGCAAAATGATTTTAGTTGGGAACAGTTCGCAACTC
TGTCCCATAAAAATCAGCATATTCCCATCTATCCCATATCCAGCGCATTG
ACCATCGGGATACTGAAGGGAGATTCCATCATCTCTTAGAAAGATCACCA
TCTCTTTTGTTTCAATTTGCATATAGCTACCTGGAGGATTTATGAATACA
AGGATTTTCATGGACTATTACCATGAGATTGATTTTCCATCTTTATTCGC
GAGAGCAGTGGAAAGCGATGACGATGTGGGTACTACATTGCGCATTCACC
TACTTTGTGAGCGCATGGTCGAAGCATGGATATGCGCATGCTGTGACTGC
CAAGATCCTCTACGCCGGACGCATCGTGGCCGGCATCACCGGCGCCACAG
GTGCGGTTGCTGGCGCCTATATCGCCGACATCACCGATGGGGAAGATCGG
GCTCGCCACTTCGGGCTCATGAGCGCTTGTTTCGGCGTGGGTATGGTGGC
AGGCCCCGTGGCCGGGGGACTGTTGGGCGCCATCTCCTTGCATGCACCAT
TCCTTGCGGCGGCGGTGCTCAACGGCCTCAACCTACTACTGGGCTGCTTC
CTAATGCAGGAGTCGCATAAGGGCATCGGTCGACGGGATCACGTTGTGTC
CCTGAAGCTCTCCTGTACCCAAACACAAAGGTGATGTCCCCAGCATCCCT
ATCCCAGCACTCTGGGGGACTCCTATTGAATTCCTCCTTGGGCTTGCTGC
CTTCTCTTCCCGTTCCCAGAGATCCCAAAAGGTTAAGCACCTTTGGGTCA
GTGTTCAGAATTGTCACTGCCAGTTTTGGGGTATCAGTGGCAAATTGAGA
CCCTTTTACCCAATCTTGCACCACTCTGGTTCCCCAGTCTTATGGTTTTA
GATGGAGTAAAAAGGTTTATATGTCATAAAGTTCTTCTGTGTCTGGTTAT
TCGCTGCTTCTGGATGCCAGGATCATGGGGATAAGGGGAAAACAATGGGT
TCTCTTATGCGTAGAGATGCAATCAGATGGGGAGAAAAAGAAATCTTAAT
CTTTCTGATCCATCTGACAGATATTCAGTACAGCCCTGAGGATGTGGGGA
AATAAATCTNGRAGAGTTKGTKGGCAGTTCCAAGGATTTGGGAATGACTA
AATCCCATTCCTGGKKWYTGCACAAAGTTGSCTGTGTTGGAACCCAGAAA
GATCCATGCAAGTGGGTCATCCCTGAAAGCATTGTGTTCTGCTGTCTGCT
AGCGGAGAGAAAGACACAGAGGGGAAAATTAAGTGTTTTATTGTTAATTA
TTGTACACTCTGAGGTTTCAAATACCAAATCTTTAACGAGAGCGGACCAC
TTGATTTGAGGGTGACCATCTCAGATGGGGACAACTGTACCTGATCAGGC
AAACCTGGGGGAAATTTGCCTTTCTGCCACTCTTTTGGGTGGGATTTTCC
CTTTTGACCACCATTTTCTACATTCTAATCACCCATTGCAGCACTTCTCC
CCCTTTTTTTTGCCCCATTTTTCTCCTGCTCAGCACTTCTTAACAATATA
ATATAAATCAATATCATATCAATATGATTCTATGCCAATAGATTAATGGG
GATGAAAGACACATAAAAACCCAAGTCCTCATTTCATCTGCTTCCCATGG
GATGGGTGGGGAGGTGGCTGTCCCCTGAGGCTGTAGGATGTGGGGTCACC
CTTGTCTGTGTCTCAGGGACACAGCCTCAGCTTGGACCTGACCCCTACCA
CCCACAGCCACGGACGGACCCTCTCCCCAGAGAAGGATGCATGGGAAAAA
```

CGGTCAGCCCATTCGGCGCCAA~~GCTCTTCAG~~CAATATCACGGGTAGCCAA
CGCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATGA
ATCCAGAAAAGCGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCG
CCATGGGTCACGACGAGATCCTCGCCGTCGGGCATGCGCGCCTTGAGCCT
GGCGAACAGTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCAT
CCTGATCGACAAGACCGGCTTCCATCCGAGTACGTGCTCGCTCGATGCGA
TGTTTCGCTTGGTGGTCGAATGGGCAGGTAGCCGGATCAAGCGTATGCAG
CCGCCGCATTGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGT
GAGATGACAGGAGATCCTGCCCCGGCACTTCGCCCAATAGCAGCCAGTCC
CTTCCCGCTTCAGTGACAACGTCGAGCACAGCTGCGCAAGGAACGCCCGT
CGTGGCCAGCCACGATAGCCGCGCTGCCTCGTCCTGCAGTTCATTCAGGG
CACCGGACAGGTCGGTCTTGACAAAAAGAACCGGGCGCCCCTGCGCTGAC
AGCCGGAACACGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTC
ATAGCCGAATAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCGTGCAATC
CATCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGAT
CTGCGGCACGCTGTTGACGCTGTTAAGCGGGTCGCTGCAGGGTCGCTCGG
TATTCGAGGCCACACGCGTCACCTTAATATGCGAAGTGGACCTGGGACCG
CGCCGCCCCGACTGCATCTGCGTGTTCGAATTCGCCAATGACAAGACGCT
GGGCGGGGTTTGTGTCATCATAGAACTAAAGACATGCAAATATATTTCTT
CCGGGGACACCGCCAGCAAACGCGAGCAACGGGCCACGGGGATGAAGCAG
CTGCGCCACTCCCTGAAGCTCCTGCAGTCCCTCGCGCCTCCGGGTGACAA
GATAGTGTACCTGTGCCCCGTCCTGGTGTTTGTCGCCCAACGGACGCTCC
GCGTCAGCCGCGTGACCCGGCTCGTCCCGCAGAAGGTCTCCGGTAATATC
ACCGCAGTCGTGCGGATGCTCCAGAGCCTGTCCACGTATACGGTCCCCAT
TGAGCCTAGGACCCAGCGAGCCCGTCGCCGCCGCGGCGGCGCCGCCCGGG
GGTCTGCGAGCAGACCGAAAAGGTCACACTCTGGGGCGCGCGACCCGCCC
GAGTCAGCGGCCCGCCAGTTACCACCCGCCGACCAAACCCCCGCCTCCAC
GGAGGGCGGGGGGGTGCTTAAGAGGATCGCGGCGCTCTTCTGCGTGCCCG
TGGCCACCAAGACCAAACCCCGAGCCGCCTCCGAATGAGAGTGTTTCGTT
CCTTCCCCCTCCCCCCGCGTCAGACAAACCCTAACCACCGCTTAAGCGGC
CCCCGCGAGGTCCGAAGACTCATTTGGATCGATCCGGAATTCTCATGTTT
GACAGCTTATCATCGATAAGCTTTAATGCGGTAGTTTATCACAGTTAAAT
TGCTAACGCAGTCAGGCACCGTGTATGAAATCTAACAATGCGCTCATCGT
CATCCTCGGCACCGTCACCCTGGATGCTGTAGGCATAGGCTTGGTTATGC
CGGTACTGCCGGGCCTCTTGCGGGATATCGTCCATTCCGACAGCATCGCC
AGTCACTATGGCGTGCTGCTAGCGCTATATGCGTTGATGCAATTTCTATG
CGCACCCGTTCTCGGAGCACTGTCCGACCGCTTTGGCCGCCGCCCAGTCC
TGCTCGCTTCGCTACTTGGAGCCACTATCGACTACGCGATCATGGCGACC
ACACCCGTCCTGTGGATCTGCCTCGTTGGCCTGCCGCAGTTCTTCAACCT
CCCGGCGCAGCTTTTCGTTCTCAATTTCAGCATCCCTTTCGGCATACCAT
TTTATGACGGCGGCAGAGTCATAAAGCACCTCATTACCCTTGCCACCGCC
TCGCAGAACGGGCATTCCCTGTTCCTGCCAGTTCTGAATGGTACGGATAC
TCGCACCGAAAATGTCAGCCAGCTGCTTTTTGTTGACTTCCATTGTTCAT
TCCACGGACAAAAACAGAGAAAGGAAACGACAGAGGCCAAAAAGCTCGCT
TTCAGCACCTGTCGTTTCCTTTCTTTTCAGAGGGTATTTTAAATAAAAAC
ATTAAGTTATGACGAAGAAGAACGGAAACGCCTTAAACCGGAAAATTTTC
ATAAATAGCGAAAACCCGCGAGGTCGCCGCCCCGTAACAAGGCGGATCGC
CGGAAAGGACCCGCAAATGATAATAATTATCAATTGCATACTATCGACGG
CACTGCTGCCAGATAACACCACCGGGGAAACATTCCATCATGATGGCCGT
GCGGACATAGGAAGCCAGTTCATCCATCGCTTTCTTGTCTGCTGCCATTT
GCTTTGTGACATCCAGCGCCGCACATTCAGCAGCGTTTTTCAGCGCGTTT

Figure 6

DM

```
      GCACAAGGAA ATGCAAAGGG GCATCACTAG GGGACATGGC ACGGGGCATT
  51  CTAGGGAGCA TTGCATGGGG ACATTGCAAA GGAAATGCAA AGGGACATTG
 101  CATGGGGACA TTGCAAACAA ATTGAGTGGG AGATTGCACC GGGATGTTGC
 151  ATGGGGACAT TGCATGGAAT GTCCCACCAA CCACCCTGCA GGGTGACACT
 201  GGGACCATCC CCAGCTCTGA CCATCCCCCC TTTGCTGCAG CACCACCCCA
 251  GGTCCGCATC GTCCCCATCC CCATCTCCAA CGACCCCGAC ACCGTCCACC
 301  TCATCTGCCA TGTTTGGGGC TTCTACCCAC CCGCAGTGAC CATCCAGTGG
 351  CTGCACAACG GCCTCGTGGT GGCCTCAGGT GACACCAAAC TGCTGCCCAA
 401  CGGGGGACTG GACCTACAGG ACACAGGTGG CCCTGAGGGC CAGCATTGCA
 451  GCAGGGAGCA CTAAAACATG TTCAGTGTGG CAATTCCAGC TTGGAGCAGC
 501  CGCTGCAGGA GGATTGGAGT GAGTTTGGGG ATGGGGATGT GGCACCCACA
 551  CCCCACAGTC CCCCACGGTT CATTGTGCCC CACGCTGTCC CCACAGGTCC
 601  CAATTTGTCC CCGGCGATGA TGGTGAAGGT GGCAGTGGCG GCCATGGCGC
 651  TGACGTTGGG GTTGGTGGCA CTCAGCGCCG GGGTTTTCAG CTTCTGTCAG
 701  CGGCCACGGG GTGAGGGATG GGGATGTGGT GCTGGGGACA TGTGTGACAC
 751  CGAGGGTCTG GTGTCCAGTG TGGGGTGTAC CTCCTCATTC ATCATCTTCT
 801  GTGTGGCAGC TCCTGGCGCT GGTCCCAGTA CCCCGTCCTG ATGCGGGTTC
 851  TCACTCCAAT CCTGGTCCCC AAAATGATCC CGGTCCGAGT TCTGGTCCCC
 901  ATCCCAGTCC TGGACCCCAT CCCAGTCCTG GTCCCCATTC TGGTCTTGGT
 951  CCTGGTCCTG GTTCTGCTCC TGGTCCCTAT CCCTGACTCT GGTCCCGGTC
1001  CCCATCCCGA TGCCAGTCCC AGTCCTGGTC CCCATCCTGG TCCTGCTCCT
1051  TGGTTTGGGG ACCTCAATGA CTGGAACTCC CATGTCCCAA CATGGGGACC
1101  CACAGTTTGG GGTGAGGGGC TCTCACCCCC CAATAAAACC ATCTGCAGCC
1151  CCAACCTCGC TCCAATTCTT CGTTCCCACG TTGGGTGGGT CGGGCTCCCA
1201  GTGCTCCCAG CCGTNTATGT CCCGTAAGCG TCGGCTCCAC TGCATAAAAA
1251  GAAAAAAAAA AAA
```

Figure 7

Séquence Génomique TAP1

(Du début de l'exon 2 à l'extrémité 3')

```
GGC GAG ATG GCC GTG CCC TAC TAC ATG GGG CGA GCC AGC GAC TGG GTG GCC CGC GAG GAC AAG CTG GCA
 G   E   M   A   V   P   Y   Y   M   G   R   A   S   D   W   V   A   R   E   D   K   L   A

GCC ATC CTG CCC ATG GTG CTG CTG GGC CTC AGC AG  GTACTGGCATAGGGGGGACGCGGTGCGGGCAGGGGGCAGCGCG
 I   L   P   A   M   V   L   L   G   L   S   S

GGACCCCCTGACACCCCACTGCCGTCACAG  C GCT GTT ACT GAG CTG GTG TGT GAT GTG ACC TTC GTG GGG ACA
                                   A   V   T   E   L   V   C   D   V   T   F   V   G   T

CTG AGC CGC ACG CAA AGC CGC CTC CAG CGC CGC GTC TTC GCC GCC GTC CTG CGG CAG AGC ATC ACC GAG
 L   S   R   T   Q   S   R   L   Q   R   R   V   F   A   A   V   L   R   Q   S   I   T   E

CTG CGC GCC GAT GGG GCC G  GTGAGGGGCACCGGGCTGGGAGGGGACACGGGGATAAGGGACAGGGGTGGCACTGACGGCGCTG
 L   R   A   D   G   A

TCACCCGGCAG GG GAT GTG GCC ATG CGG GTG ACG CGG GAT GCG GAG GAC GTG CGC GAG GCG CTG GGC AAG
             G  D   V   A   M   R   V   T   R   D   A   E   D   V   R   E   A   L   G   K

GCG CTG AGC CTC CTG CTG TGG TAT CTG GCA CGC GGC CTC TGC CTC TTT GCA ACC ATG GCC TGG CTG TCC
 A   L   S   L   L   L   W   Y   L   A   R   G   L   C   L   F   A   T   M   A   W   L   S

CCG CGC ATG GCG CTG CTC ACC GCG CTG GCG CTG CCA CTG CTG CTG GCA CTG CCC AGG GCT GTG GGG CAC
 P   R   M   A   L   L   T   A   L   A   L   P   L   L   L   A   L   P   R   A   V   G   H

TTC CGG CAG  GTATGGGCTGCTGTCTGCACCTCCATGTGCCTTTGGTCCCCTCCATGTGCCTCTGGTCCCCTCCATGTGCCCAGTGTC
 F   R   Q
```

```
ACCACCATGTACTCATTGCCCTATCCATGTGCCCACTGTCCCCTCCATGTACCCACCATCCTCCTGCTGTTGTCCCCTCTGTGTGACCGGC

TGTCCCTCCACGTGCCCCATGCCCCTTCCATGCGTCCCACCATCCGTGCCATGTGCTCATTATTCCCTATGTGTGACCATTATCCCTTCCA

CATGGGTTCTGTTCTCTGCATGCCCCCACTGTCACCTCCACATGCCCACCGTCCCCTTTATGTCCCCTCCATCCCCTCCACGTGTTCTTTG

TTCCCTCCATACATGCACTGTCCCCTCCCCAGCCCCCATTCCCTTCCCACCCGCCCTGCAATGACACTGCTGTCCCCAG  GCC CTG GCA
                                                                                  A   L   A

CCA CAG ATG CAG AAG GCG CAG GCC CGG GCC AGC GAG GTG GCA GTG GAG ACC TTC CAG GCC ATG GCC ACT
 P   Q   M   Q   K   A   Q   A   R   A   S   E   V   A   V   E   T   F   Q   A   M   A   T

GTG CGC AGC TTT GCC AAT GAG GAT GGG GCA GCT GCA CAC TAC CGG CAG CGC CTG CAG CAG AGC CAC CGC
 V   R   S   F   A   N   E   D   G   A   A   A   H   Y   R   Q   R   L   Q   Q   S   H   R

CTG GAG AAA AAG GAT GTG GCC CTC TAC ACT GCC TCT CTC TGG ACC AGT GGT  GTATGGATGGGGTGGCTCAAT
 L   E   K   K   D   V   A   L   Y   T   A   S   L   W   T   S   G

AGCATGGGGACGTGATGGGATGGGGCTGGGGGATGTGGGGACATGATAGGATAGGACTGGGGGGCATGGGGACATGGTGGGATAGGGCTGG

GAGATGTGGAGACGTGATGTAATTGAGATGTCAGGAGATGGGGACAGAATGCCAACGGGCTGGAGGCCATAATGGTGTGGAGATGGCAGGT

CATGGGAATATGATGGCATGGGGACTGTGGGACATAGATTTGATGGCATGGGGACATCAGGATGTAGCAGGCACAACAGTTCAGGGGCTCT

GGGGCAGGAGGATGCAGTGACGTGGGAATGGGGCGGCATGGGGGCTCCAGGACACTGGGAACATGATGGCATGAGGGGACATAGCACAGAG

ATAGCACAGCTGTGGGACACTGGGACAGGGGGGACATTGACAGAACAGGAAGGTGACAGAGTGGTGCTGGGGACTCAGAGTCCCAGGGGGA

GGTGTCCCCTGGTGACCTCATGGCATCCTCAG  TTC TCA GCC CTG GCC CTG AAG ATG GGG ATC CTC TAC TAT GGG
                                   F   S   A   L   A   L   K   M   G   I   L   Y   Y   G

GGG CAG CTG GTG GCC GCG GGG ACC GTC AGC ACT GGG GAC CTC GTC ACC TTC CTC CTC TAC CAG ATA CAG
 G   Q   L   V   A   A   G   T   V   S   T   G   D   L   V   T   F   L   L   Y   Q   I   Q
```

FIGURE 7 - SUITE 1

Figure 7

```
TTC ACT GAT GTC CTG GAG  GTGAGCCTGAGAGGATGCCCATATCCGCATGTCCCCATGTCTCCCTGCCACAGTCACAGTGTGTCA
 F   T   D   V   L   E

CAGTGTCCCTGTGTTCCTACATCCTCCCTGCTGTGTCTCCAGGCCAATCGCAGTGTGTCCCCATGCCCATCCATGTCCCTGTGTCCCCACG

TCTAACCCTCTGTGACCCCTGCCACATCCCTGTGTCACCTCCTCTGTCCCCATACCTACCCCGTCCTGTCCCTATGCCAATCCCACTGTGT

CCTCTGCGTCCCCATGTCACCATGCCACATGCCCCTTGCCCTCCTGGCCACGTCACTACGCTGTCCCCAG  GTC CTG CTC GAC TAC
                                                                         V   L   L   D   Y

TTC CCC ACA CTG ATG AAG GCT GTG GGC TCT TCG GAA AAA ATC TTT GAG TTC CTG GAC CGG GAG CCA CAG
 F   P   T   L   M   K   A   V   G   S   S   E   K   I   F   E   F   L   D   R   E   P   Q

GTC TCA CCC TCA GGG ACA ATG GCA CCC GCT GAC CTG CAG GGC CAC CTC CAG CTG GAG GAT GTC TGG TTC
 V   S   P   S   G   T   M   A   P   A   D   L   Q   G   H   L   Q   L   E   D   V   W   F

TCC TAC CCT GGG CGC CAG GAA ACC CGT CCT CAA  GTGGGCACAGAGACACAGCCAGGGGACACGGGGGTGTGGTGGGACA
 S   Y   P   G   R   Q   E   T   R   P   Q

GCGTGACAGGTGTGGAGCACAGTGGGGTGATTCAGGGACATGGATGTGATGGACAGGGTGTGAGGATATGAAACAAGGAGATACATGGAGG

GGGTGGTATGGGGACACTGGAGAGGGACATGAGATCATGGTATTGAGGGCGCGGGGACATGGCACATGGTGGGTTTGTGGCACTGGGACAT

GATGAGTGACACAGAGACATGGTGGGGAGGGCATGGGAATGTAGAGGCCGTGGTA


GGG GTA TCA CTG GAG CTG CGC CCC GGG GAG GTG CTG GCA CTG CTG GGA CCC CCG GGC GCA GGG AAG AGC
 G   V   S   L   E   L   R   P   G   E   V   L   A   L   L   G   P   P   G   A   G   K   S

ACT CTG GTG GCC CTC GTG TCC CGC CTG CAC CAG CCC ACG GCC GGG CGC CTG CTG CTG GAT GGC CAC CCC
 T   L   V   A   L   V   S   R   L   H   Q   P   T   A   G   R   L   L   L   D   G   H   P

CTC CCC GCC TAC CAG CAC TCC TAC CTG TGC CGC CAG  GTGAGCAGCCACATGTCCCCATGGCTCCTGGTTGTCCCCCTG
 L   P   A   Y   Q   H   S   Y   L   C   R   Q
```

FIGURE 7 - SUITE 2

```
TGTTCTTGCATATCAGCAGCCATCCTCATTGAGTCACCAGATATCTGGGTCCCCAGCCATCACCACACACCCTGATGTCTCTGCCATATCA

CCACTGTGTCCCCTGCAGTGTCCCGGCCAAGTCCCCAACCATCCTTGTGTCCCCAACCATCCCACCATGTCCCCAGATGTCCCTGACACAT

CCCCAGCCATCCCCACCGCCTCCACTGCCACGTTGCCCATGTTCCCCAGCTGTCCCCCCCACTGCAG GTG GCC GTC GTC CCC CAG
                                                                     V   A   V   V   P   Q

GAG CCG CTG CTT TTT GCC CGC TCA CTC CAC GCC AAC ATT TCC TAT GGG TTG GGG GGC TGC AGC CGG GCA
 E   P   L   L   F   A   R   S   L   H   A   N   I   S   Y   G   L   G   G   C   S   R   A

CAG GTG ACA GCG GCC GCC CGC CGG GTG GGC GCC CAC GAC TTC ATC ACT CGC CTG CCC CAA GGC TAC GAC
 Q   V   T   A   A   A   R   R   V   G   A   H   D   F   I   T   R   L   P   Q   G   Y   D

ACA G  GTAAGCTGTCCCCTTTCTGTTCCGGGTCCCCTCCATGGTCCCTCCCAGCCTGACCCCGCTCGTCCCCGCAG  AG GTG GGC
 T                                                                              E   V   G

GAG TTG GGA GGA CAG CTC TCC GGG GGG CAG CGG CAG GCG GTG GCC ATT GCC CGT GCA CTG CTG CGG GAC
 E   L   G   G   Q   L   S   G   G   Q   R   Q   A   V   A   I   A   R   A   L   L   R   D

CCC CGC ATC CTC ATA CTC GAC GAG CAC ACC AGC GCC CTG GAC AAT GAG AGC CAG CAG CAG  GTGGGATGTC
 P   R   I   L   I   L   D   E   H   T   S   A   L   D   N   E   S   Q   Q   Q

CCCCACGTCCCCGTGTCCCCACATCCCCCTGAGCCCTGTGTTCCCTCAGATTGCACGCCTAGGTCCCCATGGTCCCCTGTTCTGGTGTCCC

CTTATCTCCACTCCTGGTGTCCCTCGGTCCCTGGCAGTGGCTGAGGAACATCCCCCTGAACCGTTTCTCCTCCCACAG  GTG GAG CAG
                                                                                 V   E   Q

GAG ATC CTC GCA GCC AAA GGG TCG GGG CGT GCA GTG CTG ATG GTG ACG GGG CGG GCA GCC CTG GCG GCG
 E   I   L   A   A   K   G   S   G   R   A   V   L   M   V   T   G   R   A   A   L   A   A
```

FIGURE 7 - SUITE 3

Figure 7

```
CGG GCA CAA CGA GTG GTG GTG TTG GAG GGG GGA GAG GTG CGG CAG GAG GGA CCC CCC CAC GAG GTG GTG
 R   A   Q   R   V   V   V   L   E   G   G   E   V   R   Q   E   G   P   P   Q   E   V   V

CGC CCC GTC AGC CTT NTT GCG GGA CTG GGG ACA ACA AGG GAG CAC CGG GGG AGG GGG ACA GAG GGA TAG
 R   P   V   S   L   ?   A   G   L   G   T   T   R   E   H   R   G   R   G   T   E   G   *

CGGGAGTTTTGGATGGGGAGGGCAGGGGGTGGGTGGGATGTGGGATGGGGACACTGCGCGTTGGGGACACTGAGGGTGGAGGTGGGGACAC
CGGGGCAGCAACAAGGGACCACAAGAGCTGTGCCGTGGGCACATGGATGCCGAGCCGGGCGCGCTGCGGTACCGCTGCTGTACGACACACA
ACGGCCACAGCATGGACTGCAGTGCCACTGAGTGCCACCAGGGCCGGGGGTGGGACACAGAACTGGGAATAAAGCCGCATGTTTGT
```

FIGURE 7 - SUITE 4

Figure 8

TAP2G

```
    -213
CGCCATACATTNTGCGCCTGTCATGCACGGTGNTAATGGCCGACCTGGCCNTCATGTTGGCCCTGGCCCANTTCTTCCCAGCACTGGCCCA
TTGGGCTGGGTGGGC  -107
    -106
TCCTGGCGGAGGCCGGGCTGCGCCTCCTGGTGCTGGGGGGGGCCGGGCAGCTGCTGGCCCCCAGGGGACCCCGTGGGGCTGCAGTGCTGCT
AGCATGGGCCCCGCC  0
          t
    +1    ATCTTCCTGACCCTACGGGGCTATGTAGGTCTGCCTGGAGCTCCCCCGGTGCTGCTGGCC  ATG GCA ACG CCG TC
TGG CTG GTG CTG ACC CAC    +93      5'UT

W   L   V   L   T   H                                                  M   A   T   P   S

    +94   GGG ACA GCT GTG GTG GCA TTG CTC ACC TGG AGC CTC CTG GTC CCC ACT GTG GCC ACT GGG
GCA AAG GAG GCA AAG GCC TGG  +174
          G   T   A   V   V   A   L   L   T   W   S   L   L   V   P   T   V   A   T   G
A   K   E   A   K   A   W

    +175  GTG CCC CTG AGG CGG CTG CTG GCC CTC GCC TGG CCC GAG TGG CCG TTC CTT GGC TGT GCC
TTC CTC TTC CTC GCA TTG GCT  +255
          V   P   L   R   R   L   L   A   L   A   W   P   E   W   P   F   L   G   C   A
F   L   F   L   A   L   A

    +256  GCA CTG GGT GAG ACC TCA TTG CCC TAC TGC ACC GGG AGG GCT GTG GAT GTC CTC CGC CAG
GGG GAC GGC CTC GCC GCC TTC  +336
          A   L   G   E   T   S   L   P   Y   C   T   G   R   A   V   D   V   L   R   Q
G   D   G   L   A   A   F

    +337  ACC GCT GCT GTC GGC CTC ATG TGC CTG GCC TCT GCC AGC AG
GTAGGGACCCCACATCCCTCCACAAAACCCCATCCACCTCTGGTGGTCGTCT  +429
          T   A   A   V   G   L   M   C   L   A   S   A   S   S
```

```
     +430
GGTGGGTTTGGGGGTCTCTGTCCATATCTGGGGGTCATCTGATGGGTTCTGGGCACTCCACTGACCCTTTGTGATTGTCTGAAGGGTTCTG
GCTCTCCATTGACCC  +536

     +537   CTGATGGGTTTTGGAGTCGCCCCCCCAATTCCTTCCCAG C TCG CTG TTT GCC GGC TGC CGC GGT GGC CT
TTC ACC TTC ATC AGG TTC   +624
                                                          S   L   F   A   G   C   R   G   G   L
F   T   F   I   R   F

     +625   CGC TTC GTC TTG CGC ACC CGC GAC CAG CTC TTC TCC AGC CTG GTG TAC CGG GAC CTC GCC
TTC TTC CAG AAC ACC ACA GCA  +705
            R   F   V   L   R   T   R   D   Q   L   F   S   S   L   V   Y   R   D   L   A
F   F   Q   N   T   T   A

     +706   G GTACAGACTGGGGGCACTTTTGTCCCTGTCCCCACACCATACCCCCAGCTCACCGTACTCAACTCCACAG CT GAG
TTG GCC TCC CGG CTG ACC ACC  +828
                                                                                  A   E
L   A   S   R   L   T   T

     +829   GAT GTG ACG CTG GCG AGC AAC GTG TTG GCA CTC AAT ATC AAC GTC ATG CTG AGG AAC CTG
GGG CAG GTG CTG GGG CTC TGC  +909
            D   V   T   L   A   S   N   V   L   A   L   N   I   N   V   M   L   R   N   L
G   Q   V   L   G   L   C

     +910   GCC TTC ATG CTG GGG CTG TCC CCG CGC CTG ACA ATG CTG GCA CTG CTC GAA GTG CCG CTC
GCC GTC ACC GCA CGG AAA GTC  +990
            A   F   M   L   G   L   S   P   R   L   T   M   L   A   L   L   E   V   P   L
A   V   T   A   R   K   V
```

FIGURE 8 - SUIE 1

Figure 8

```
     +991   TAT GAC ACC CGG CAC CAG
GTGATAGCAGGGATGGGATGGTAGGGTTGGGGTGACAGGGATGGAGGCAATGGCAATGGGATGGGAACAGTGGGAGTGGGGAT  +1091
             Y   D   T   R   H   Q

     +1092
AGTGAGGTGGGGATTGTGGGGTCAGGGTGGCAGGGATGAGGGCAGCTGCAATGGGATGGGAACAGTGGGAATGGGGAGAGCAGGATGGGGA
CATGGGTCCAACACA  +1198

     +1199
GCAAGGATGAGAGGATGGAGAAGAGTGGAGCAGGAATGGAAGTGGGATGGCGAGTACTTGGCCATCCCATGGGTGCTGACACCCACTGTCC
CCCCAG ATG CTG   +1302

M   L

     +1303  CAG CGG GCC GTG CTG GAT GCA GCA GCC GAC ACC GGA GCG GCA GTG CAG GAG TCC ATC TCT
TCC ATT GAG ATG GTA CGG GTC  +1383
             Q   R   A   V   L   D   A   A   A   D   T   G   A   A   V   Q   E   S   I   S
S   I   E    T   V   R   V

     +1384  TTC AAT GGC GAG GAG GAG GAG GAG CAC CGC TAC AGC CAG GTG CTG GAC AGG ACC CTA CGG
CTG CGG GAC CAG CGG GAC ACA  +1464
             F   N   G   E   E   E   E   E   H   R   Y   S   Q   V   L   D   R   T   L   R
L   R   D    Q   R   D   T

     +1465  GAG AGG GCC ATT TTT CTC CTC ATC CAG CGG
GTGAGGCTGACACGAGGGGACACCCTGGTGTTCTGGGTGGGATCGGGACATCCCCGCTGAGCCCCAT  +1561
             E   R   A   I   F   L   L   I   Q   R

     +1561  CCCCACAG GTG CTG CAG TTG GCT GTG CAG GCA CTG GTG CTA TAC TGT GGG CAC CAG CAG CTC
CGC GAA GGG ACC CTC ACT      +1641
                      V   L   Q   L   A   V   Q   A   L   V   L   Y   C   G   H   Q   Q   L
R   E   G   D   L    T
```

FIGURE 8 - SUITE 2

```
     +1642  GCC GGC AGC CTC GTC GCC TTC ATC CTC TAC CAG ACT AAA GCT GGC AGC TGC GTG CAG
GTGAGGTCAGGCAGTGCGTCCTCTGCCACCG  +1729
            A   G   S   L   V   A   F   I   L   Y   Q   T   K   A   G   S   C   V   Q

     +1730
GATCCCCATGACTGTGGCCACATCCCCGTGTCCCCACCCTGGGTGCTGTGCCTGGGGGTCACATCCCCATGTCCCTATCCTGGGTGCTGTG
CATGCAG GCA CTG  +1834

A   L

     +1835  GCG TAC TCC TAT GGT GAC CTT CTG AGC AAT GCA GTG GCC GCC TGC AAG GTC TTT GAT TAC
CTG GAC TGG GAG CGA CCT GTG  +1915
            A   Y   S   Y   G   D   L   L   S   N   A   V   A   A   C   K   V   F   D   Y
L   D   W   E   R   P   V

     +1916  GGT GCT GGT GGC ACC TAT GTG CCC ACC AGA CTG CGG GGC CAC ATC ACC TTC CAT CGG GTG
TCC TTC GCC TAT CCC ACT CGC  +1996
            G   A   G   G   T   Y   V   P   T   R   L   R   G   H   I   T   F   H   R   V
S   F   A   Y   P   T   R

     +1997  CCT GAG CGC CTC GTC CTG CAA GAT GTC ACC TTC GAG CTG CGC CCC AGT GAG GTG ACG GCG
TTG GCG GGG CTG AAT GGC AGC  +2077
            P   E   R   L   V   L   Q   D   V   T   F   G   L   R   P   S   E   V   T   A
L   A   G   L   N   G   S

     +2078  GGG AAG AGC ACC TGC GTG GCA CTG CTG GAG AGA TTC TAT GAA CCT GGG GCC GGG GAA GTG
CTG CTG GAC GGG GTG CCG CTG  +2158
            G   K   S   T   C   V   A   L   L   E   R   F   Y   G   P   G   A   G   E   V
L   L   D   G   V   P   L
```

FIGURE 8 - SUITE 3

Figure 8

```
    +2159  CGG GAC TAC GAG CAT CGC TAC CTG CAC CGC CAG
GTGANGGGGTGGGGGGAAATGTTAGCTGCACTGAACANTGCTGGGGCTGAACCTCTGCCCTGG  +2254
            R   D   Y   E   H   R   Y   L   H   R   Q

    +2255  GGGCAG GTG GCA CTG GTG GGG CAG GAA CCC GTG CTC TTC TCT GGC TCC ATT CGG GAT AAC
ATT GCC TAC GGG ATG GAG GAC    +2335
                   V   A   L   V   G   Q   E   P   V   L   F   S   G   S   I   R   D   N
A   Y   G   M   E   D

    +2336  TGC GAA GAG GAG GAG ATC ATA GCA GCT GCA AGG GCT GCG GGT GCT TTG GGC TTC ATC TCT
GCA CTG GAG CAA GGC TTT GGC  +2416
            C   E   E   E   E   I   I   A   A   A   R   A   A   G   A   L   G   F   I   S
A   L   E   Q   G   F   G

    +2417  ACT  G GTGAGTGCTGGGGAGCAAGGGGGGACCCGGGTGTCTGACCCCACTCATCCCCACCCTCATCCTGCAG.AC --
GTA GGG GAG AGA GGG GGG CAG    +2511
            T
G   E   R   G   G   Q                                                                D

    +2512  CTG TCA GCG GGG CAG AAG CAG CGC ATC GCC ATC GCC CGC GCT TTG GTG CGG CGT CCC ACC
ATC CTT ATC CTC GAC GAA GCC  +2592
            L   S   A   G   Q   K   Q   R   I   A   I   A   R   A   L   V   R   R   P   T
I   L   I   L   D   E   A

    +2593  ACC AGT GCT CTG GAT GGG GAC AGC GAT GCA ATG
GTGAGCACTGAGCAGTGGGTGGGGGAGGGTCTG?CCCTGCAGTGCATGCTGATGGGCAGCTG  +2688
            T   S   A   L   D   G   D   S   D   A   M

    +2689  TGTGTCCTACAG CTA CAG CAG TGG GTG AGG AAC GGA GGG GAC CGG ACG GTG TTG TTT ATC ACC
CAC CAA CCA CGG ATG CTG      +2769
                         L   Q   Q   W   V   R   N   G   G   D   R   T   V   L   F   I   T
H   Q   P   R   M   L
```

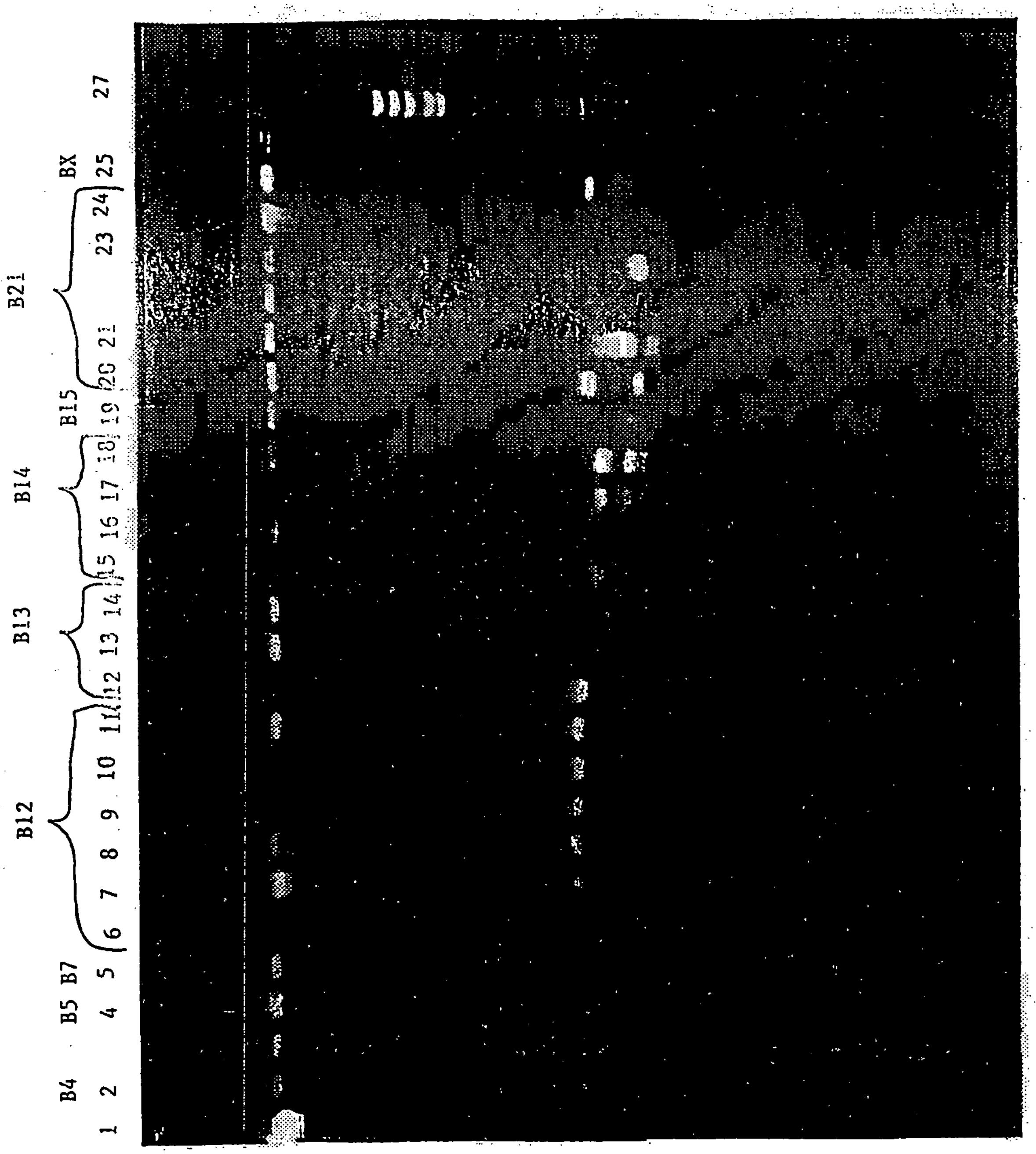
FIGURE 8 - SUITE 4

```
    +2770  GAG AAG GCA GAC CGC ATT GTG GTG CTG GAG CAT GGC ACG GTG GCT GAG ATG GGG ACA CCC
GCC GAG CTG AGG ACC CGC GGC  +2850
            E   K   A   D   R   I   V   V   L   E   H   G   T   V   A   E   M   G   T   P
A   E   L   R   T   R   G

    +2851  GGA CCC TAC AGC CGG CTG TTA CAG CAC TGA
GAACCATGGAGCAGCTGGAGTGGCATGCGATGGGATATGGGGAGCAGTGACTGCCTTTGCTTCCAGC  +2947
            G   P   Y   S   R   L   L   Q   H   *

    +2948  TGCAGGATGGGATGTTTTGGGATTTGTGTGGAATAAAGTGGAGATGCTTTGT
+2999      3'UT
```

INTRON 2-3 : EF23(1B+1R)3R
INTRON 3-4 : EF23 2(1)
INTRON 4-5 : EF23 352H CON
INTRON 5-6 : EF23224RS
INTRON 6-7 : EF23(5B+5RB)1R
INTRON 8-9 : EF23277B CON
INTRON 9-10: EF23 43RSR
INTRON 10-11: EF23 43RSR
INTRONS 1-2 ET 7-8 INEXISTANTS CHEZ LE POUET

FIGURE 8 - SUITE 5

FIGURE 9


1
B4 2
B5 4
B7 5
B12 6 7 8 9 10 11
B13 12 13 14
B14 15 16 17 18
B15 19
B21 20 21 23 24
BX 25
27

```
GTCCCTATTCCCATTGTGTCCTCACATCTGCCATCTCTTCCTGTCCCCAT
CTATGCTTTGTGCCCCCCATCCCTTACCCCATCCCCACGTGTCCCTGTGG
TGCCACCTCCACACGTGTCCCCGTGTCCCCACAGCGGGGCCGTGGCGCAA
TAACACTGTGATGTGGCGCTGCTGCCGGGACGGAGCGACGGCGCTGCCCA
TCCGTGCCACGTGCCAGCAGAGGGGACAGCGGGTGACGACGGCCGGGGGC
TGCCGAGACGCCTTCCTGCAGTGCTGTGAGGTGGCACAGAATCTGCGGCG
GAAGGACAGCGCGGGGGGTTGGCACGGGGTGAGTGTCAGCAGTGTCCCC
AAAGCGGGGAGGGGTGACCTGGGGTGGTGGCGGTGGGGTGTGGGGGAGTT
GTAGAAATGGGGACCCCATTGGTGTGGGGAGGTTTGGATAAGGGGTCCCC
ATGGGTGGTGGCACATGGGGACATCCCATAGCCTGGGATCCCATGGTTGG
GGCCATCCCGTACCTGGGATCCCCACATGGGAGGATGTCCCCCGCTGTCC
CCATGGCAGTGATGGAGGCACAGCTGGCAGAGCAGCTGTTGGATGATGAT
GAGGACGTCCCCACGAGGAGCTTCTTCCCTGAGAGCTGGCTGTGGCGACG
CATCCATGTTGCTGGCACTGCACGGTGTGTCCCCGTGTGTCCCCATGTCC
CCATGTCCCCATGACTTTGTGTCCCCGTGTCCCCATCTCCCCATCTCCCC
AGGCTCTCAGTGCTGCTCCCTGACTCCATCACTACGTGGGAGATTCAGGC
AGTCGCCATCGTCCCTGGACATGGTGAGTGTCACCCCCTCCAATGGCCCT
GCAGTGTCCCCCTGACATCCCCCTCGTGGTGTCCCCATGTCCCCCACGTC
CCCAAGTTCCTATGGTGTCCCCATGTCCCCCCTCTCCCCCTCCCCCCGGA
ATGTCCCTGTGTCCCCGTGGTGTCCCTGCACTGCCCCGCAGTGATGAGGT
CCTGGCAGGGCTGTGCGTGGCGGAGCCGCAGCGGGTGACGGTGACACAGG
ACGTGCGTGTGGCGCTTTGGCTGCCCCCCAGCATCCGGCCCCTAGAGCAG
ATGCAGCTGCAGCCCCTCATCCACAGCAGACTGCCCCGCAGCATCAACGT
AAGCCCTATAGAGACCCCATAGGCACCCCAGAGATACCTCTTTCCCTCTA
ATAAATACCACTTTGCTTCCAATAGATAACCCTCCTGCCCCATAGGTACC
CCTGTGCTCCATACTTGCCCTGCCACAGCATACATACCCCTTTCCCTCCA
ACAGATATGCGTTGCCCCATAGATACCTTCTTTCTGCCCTATAGATAACC
CCTCATGCCCCACAGATTCCCGTTTCCTTTCAATTGGTACCCCCTGCCCC
TCATATATCCCCCTCTACCCCACGGATACCCCCTTAGACACCCGGTACCA
CTTCTGCCCCATGGATACCCCCTGTGGCACATAGATACCGCTTCTGCCCC
ACAGATACCCCCTTCCTACTCCACTGTCCCACAGCCCCCACTGCCCCATG
GCCACCCATAGCCTGGTGGCATCGGGTGACAGTGACGGTGATGCAGGTGA
CGGTGACACTGTCGGCAGTGGAGGGGGTGTGCGCGGCGCTGGATGGGGTC
CCCCAGATGCTGGAGCTGCCCCCGGGGAGGGCAGTGGCTGCACCCCTCAC
TCTGGTGGCCCTCCACCCTGGGGACATCCCCATCACCATCACCGCCCGCG
GGCCATGGGGGCTGGGGGACCGTGTCACCCGAGTCCTGCATGTCGAGGTG
AGATCAGTGGGGTCCCCTCCAGTCACCTGGGTCACCTCTGGGGTCCCTTA
AAGCCCTGCGACCTCCTGGACATTGTTGTCCTTGTGAGCCTGCGGTCACC
CTGAATACTGGGGCTGTCACTTTGAGGTTCATGGACACCATGTCCCTGTG
TCCATGGTGGCCCTGGACATGTTGGTCCTTATGGGATCTGGGGACATGGG
GTCCTTGGTGGTCCTGGATACTGCAGTTGTCCTTTTGTGGACACTATGTC
CCCATGTCCTTGGTGGGAATGGTGTCATCCATTCCCGCAGCCTGAGGGAG
AGCTGCACCTGGAGGAGAGCACCTACATCCTGGACGCAGATGGTGGGTGT
GAGGACTGGGGGACACTGGGGAAACTGGGGACGTGGGGCCGGACCCTGTG
GTGTGGTGTCCCTACAGATAAGCGGAGCCGGAGCCTGAAGCTGCCGGGGG
ACGTCCCTGCAGAGATCGTCCCTGATGGGGACTTCAGCATGAGCATCCGT
GTCAGTGGTGTGTGGGGATGGGGACATGGGGTGGGGACATGGGGGTGGGT
ACTGGGAACGTGGTGGGGATGTGGTGGTGGGCATAGGGGACATGGGGACA
TGGGAGGACATTTGTTGGGGACATTGATGTCCATCCCTGATCATCTCTCT
GTCCCTATGTCCCCATACCCATGTGTGTGGCCATGTCCGCACGCTGTGCC
CCTGTGTGTGTCCCCTGGGTGTCCCCACATGTGCTCACATCCTTATTACA
TCCCCACATCTCCTGTGTACAACCCCGTGTGCCCTGATGTGTGCCCCTCC
ACACATCCCCATGGGTGTCCCAATGTTCCCATGTCCCTCTGCTCATCCCC
ATCCACATCCCCATGCCTATCGCCTATCGCCACGTTCGCCCCATTTGCCA
TCCTATCCCCATGTCCCCATGTCCCATATCTCCATACCCCTGTGACCCCA
```

FIGURE 10

..5FIN.txt

```
TATCCCTGTCCTTCAACTCCCCTCCCATCCCCACACCATCCCCATGTCTT
CTGTCCCCACACCATCCCCATATCCCCCTGTCCCCCCTGTCCCTGTCCCA
GGCCGGGTGCCGGGCTGGGCACTGCAGGGCGCTCTGGGGATAGGGGACTC
TCTGCTCCGCTCCCCCCGGGGCTGTGGGGAGCAGTCCCTGATGTCAATGG
CACCCACTGCTGCTGCTCTGCGCTTCCTGGATGAGAGCGAAGGGTGGGGG
CAGCTGCCCCCAGGGCACCGACAGCGCGGCCTCAGAACCCTGCAGCAGGG
TGAGCTATGGGGCAGGTTGTGCTTTATGGGGTGGGCAATGCTTTATGGGG
TGTGCAGTGCTCCAAGGGATGTGCAGTGCTTCATGGGGGATGCAGTGGGG
TTTGATTTGATTTGATTTATGGGTTTGCATTTCTCCTCCGAGGATTGCAT
CTCTCTATGGTGTTTGCAATGGGATGTGCAGTGCTCCAGGTGGAGGTGCA
GAGCCCTATGGGGGTGCAGTGCTGTGTAGGGGATGTCTGTGGTGTCCCCA
ATGGTCTCTGATGTCCCCACAGGCTTCGAACGGGTGCAGAGCTTCCGCAA
AAGTGACGGCTCCTATGGGGCATGGCTGCACCGGGACAGCAGCACCTGGT
GAGGGGAGCGGGGATGATGTGGGGACATGGGGATAGTGAGGGGATGTGGG
GATGCTGGGGTATGGGGATGTGAGGACATCATAGGGACATGAGCGGTGGG
GCCATGTGGATTTGGGGACGTGGTGACACGGTGTCCTGGTGCAGGCTGAC
GGCACTGGTGCTGCGTGTGCTGGCCCTGTCCCGGCCCTATTTGCCAGTGG
CTGCCAGCGGCCCCGCTGCGTCCCTGCGGTGGGTGCTGGGGCAGCAGCGC
CCAGATGGCGCCTTCTTGGAGCACAGGGCTGTGGTGCACCGTGAGATGCA
GGTGGGTGACACATCACTGCTGTGTGCAATGTCCCCATGCAGGATCTCCC
CCTGCAATGTCCCCTGAAGGTCCCTGCAGGCTGACCCCACATTACACTGT
GTCACTCACGTGTCCCCGTGTCCCCAGGGTGGTGTGGCAGACCCCGGCCC
GGAGGCCACCGTGTCGCTGACGGCCTTCGTGGTGGTGGCCCTCCATGGTG
CCCGCGCTCTGCTGCCCCCGGACAGCCCTGAGCTGCCCCTCCTGGTGAGT
CCCATGTCCCCACCCCTGTGTCTTGGTCCTCATATCCATGTGTCCCTTGT
GCCCCATCCCCCAAATCCCCACATCCCCCATATGTTCCCATACCCTGCTG
TGTCCCCCCAGTGTTCCCCCGTCTTTCATTCTCCACTATCCCCCGTATTC
CCATATGTCCCCCTGTCCACCAGTGTCCCCTCATCCCTCTGTGTCCCCCT
GTCCCCCAGTGTCCCCCACGTCCCTGTATGTCCCCATGTCTCCTAGTGTC
CCCCATGTCCGTGTCCTCCAGTATCCCCCATGCCTCCCCGTGTCTCTTCA
TGCCCCACACTCCACGTCCCCACACTCCATGTCCCACTGCCACAGGACAA
ATCCCTGTCCCGGGCCTCCACGTTCCTCCGGGGCCGCGTGGAGCAGTTGG
GGACCTATGGGACAGCCATTACATCCTATGCATTGGCACTGGTGGACACC
GCTCCTCCGGGGCCGCATCCGGCGGTGGAACGTCTGCGGGGCATGGCCCG
GAGCGCCCACGGTGCGTCTGTCTCTGTCCCCATGGGGTGGTGGCACCTCT
GTCCCCATGGCTGCCTCCTGGACCCCTCTGTCCCCTCCTTCAGATTCACT
CTCATTCGAATCCTTCAATTTTATTCTCCCTCAAACTCTTCTTCTTTGTA
TTCTTCACATTCATTCCTATTCAAATTGCTCTCCTTCCTGTCTGTTCTTC
TTCAAATTCTTCTTCAATTTTGTTCTCCTGATTAATTCTCTTAAAATTAA
CTCTCGATCAAGTTCTGCAGATTCGTTCCACTTCGGATGGATTCTTCTCC
AAACTGTTCTTCAGATTCACTCTCCTTCAATTTCGTTCTTGTAATTAATT
CTTCTTCAGAGTGATTCTTCAAACTCTTCTTCATGTTCTCTTCAAGTCCA
TTCCCTGCACTGACTCCGGGTGCTCAGGACCCCCCCGTGACCCCATATGA
CCCCATATGAACCCCCCATGACCTCCACAAAACCATATGACCCCGTGACC
TCCCATGACCCCTCATGACCCCATATGACCCCCCATGACCCCATCCCTGT
GCAGGTGGCCGTGCAACCTTCTGGCCATCCGGTGGCCCCGCAGCCACGGT
GGAGGCGACGGGTTACGCCCTTCTGGCACTGCTGCAGAGCCGCGACATCG
CCGGGGCTGCGAGGGCGGCACGGTGGCTCCGACAGCAGAGCAATTACGGG
GGTGGCTTCCACTCCACGCAGGTGGGTGGGGGTCACTGACCCCCCGGGTG
CCTCGGGGTGGGGGTGATTTGATCCCCAGGTACCTCTTTGGTGGCTGTGT
CCCCAACCTGCTTGGTGTTCCCGCAGGACACGCTGGTGGCCCTGGAGGCG
CTGGCCCAGATGTGGCTGCACTGGGGCCGTGGGAACACAATGGGGCTGAA
CCTGGGGCTCTCCTGGCCGGGGGTGCCCGGGGGAGGGCTGGTGGCACTC
AGGTTATGCTGAAGCCGGGGCTGGAGCCGCTGGAGCAGGAGCTGCAGGTG
GGGACATGGCGGGATGTGGGGACACGAGGGATGTGAGGACACTGGGGACA
```

FIGURE 10

SUITE 1

A5FIN.txt

```
TGTCTGGACTTGGTAGGATGTAACATGAAGACACTGGGGACATGGTAGGA
CATGGGGGACATGAGAACACGGGATGTGGGGGACATGGTAGGACATGATG
GACACAGGGCTTTGGGGTCCTTGGGTCCTCGCTCTGTCCCCATGTCCCCA
GGTGCCTCTGGGCAGCCCAGTGACAGTGCAGGTGGAGGGACACGGCGAAG
GGACGCTGACGGTGGGTGGCTGCATGGACATTGGTGTCATCTCCAAGACC
GATGTCCCCTCACAACCTCCCCTCATGGTGTCCCCTCATGCTGCCACGGT
GTCCCCTGCTGTCCCATCATGGTGTCACGCTGTCCCCAGGTGCTCCGCCA
GTTCCGCCTGCTGTCACCTCCGAACGCCACGTGCCAGGCGCTGCACCTGG
AGGTGGCCATCACCGGCCCCATCCTGTACCATGGTGAGGCCCCACCCAAA
GGCCCCGCCCCCTTTTCCTCGCGGGGGGCGTGCCCTCAACCCTGTTTTGC
ATATCCCAACCCCCAGCAGATGAGGACTACGAGGACTACGAGGACTACGA
GGAGGCGGAGCCTAAGGAGGGGGAGGAGCCTACGGAAGGGGCAGTGCCCG
TGGAAGGGGCGGGGCCAGCAGATGACCCCGCCCCCCTCAGCCCCGTGTCC
TTATGGGATGCCCGTAAGCGGCAACGCCGCAGCACACATAACCCTGCCCA
CGAGGTGGCCTTCCTGGTCTGCTTCCGGTGAGGGGCGGAACTTCCTGTCC
CTGGGGGCGGGTCTTCCTGCTGATGGGCGTGGCTTATTGCTGAGGGGCGT
GGCCTGTTGTAGGCGGAGCCCAGGGGTGGCACTGACTGGGATGGCGGTGG
TGGAGATCACTCTGCTCAGTGGCTTCTCACCCCATAGAGCTGACCTGGAC
AAGGTAGGGGCCCAGGGGGACTTGTGGGACATGTTGGGGGGTTGAGGGGA
GTTATGGGGTGTGGGGTTTGGGGGTGTTGGAGTTGTTGAGGTGGCAGAAT
GTTTGGGTTGGAGTCATGGGATATGGGGCTATTGGGGTTTGAGGGTGTTG
TGATGTTGGGAAACATTGAATTGGGGTTGTTGAGTTTGAGGGTGTTGGGG
TGTGCGGGTGCAGAGCTGCAGCTGCTGGGTTGGAGTATTAAGGTGTTGGG
ATGTTGGGGTGTTGGATGGCTTGGATGCGGGTGTTGGGGTGGGCACGTAT
CTGGGTGCTGCTGTCCCACAACAGCTGCGGGACGTGGTGGATCACTGGAT
CAGTCACTATGAGTTGGAAGGAAACCAGTTGGTGCTATACCTGGATGAGG
TGTGTCCTCCCGTGTCACCCTATAACCCCAGTGGCCCCATGTTCTCATAT
CCCCCATGTCCCCGTGTCCCCACACCATATCCCATTCTCCCCACACATCC
CCGTGTTCCACCACGTGTCCTCATTTCTGTCCCTGTCCCCAGGTCCCCCC
CGAGCGGCAGTGTCTCAGTTTTGGGGCCACCCAGGACGCGGCTGTGGGTC
ACATGCAGCCGGCAATGGCAGCCATCTATGACTACTATGAGCCTGGTGGG
TGGGGCCTTCAGTGGGAGGGGCCTAAATGGGTGGTGGTCTTCATGGGTGT
GACCATTGGAGGAGGCGTGGCCGATCTGACCCCTCCATGCCCCATCCAGG
ACAGCGCTGCACCGTCTTCTACAACGCCCCCCAAAGGAGCAGCACCATCG
CCACACTGTGCTCCCCCAAAATCTGTGAATGCGCCCAAGGTAGGACCCCA
CTGTGACTCCATATGTAGGGCCCCCATCCAGTGAACCCCCACATCCTCCT
CCTAATTTTTGAAGATCTGGGGGTGAAATTATGGGGTTTATAGGGGAGCG
TGGTTGAGTGACATGCAGGACATGGAGGGAACCCACACCAAGAACCTTGT
GTTTTGGGTCCCTGATGATGTTGGGAGATCCTATTGATGTTGGTGGTCCC
CAGGGGGGTGTCCCCAAGCCCAAAGGAGGACACAGGAGGTGACAGCTGAT
GACCGCCATGACTTTGCCTGCTACAGCCCCCGCGTGGACTATGGTGAGAT
CCCAAATCACTGCACCTCAAACCTGACCCCAAATTGGCTGCATCCCGAAC
CCCAACTGCCCTAAATCCCATCTGCTGCCCCTGAGTCCCACAGCTGCACA
CTGTACCCCACAAGTGGCCCCTGAAGCCTAAAAACATTCACGAGGATTTT
GTAGTTTTCTCCCTGTACCCCAGTTGTCCCTCTGACCCCAAGAACCCCAC
AGCTGCCCTATGCTGTCCCCTGCCCGCCATAACTCCTCTGATACAATAAC
CCCCGTGACCCCATCTTTATGACCTCCATGACCTTTGACCCCCAGCACTG
GTGGTTCGGGTGCTGTCCCAGAGTGAGATAGGGGCTTTTGTGGCGTTTGA
GACGGAAATCAAGGAGGTGCTGCTTGAAGGTGAGACTGAGGGTAGTGGGA
CGGACTGGAAGGTGAGAATGGGAGCACTGGGAGAGGCAGGGAGTACTGAG
AGGGACTGGGAATGACTGGAAATTGAGACTGGGTGGACTGGGAACTCTGG
TAGAGACTGAATGGGTATACTGGGAACACTGGAAGAAGTTGTGGGATGAG
AAGAGGATGCTGGGATAGGAGACCCCCCCCCTTGTGCTAGGGGGGTCTCT
CAGCCATACTGGCACAATATGAGAGTATACTGGGTGGTACTGGGAAAGCT
GGGAGGACTCATACTGGTGTGTACTCGTGCAGGGCAGGACACAGCAGTGG
```

FIGURE 10

SUITE 2

A5FIN.txt

```
CCCCTGGGGAGCGGAGGCGGCTGCTGGTGCGGAAGAGCTGCCCACTGCGC
CTGCAACTCCACAACATCTACCTGGTGATGGGGGGCAGCGGGAGGACGCG
GGACCCTGAGGGGCGGTGAGAAGGGGCTGTGCCCCATGTCCACATGTCCC
TGTGTTCTCATGTTCCCATGTCCCATATCCCAGTGTTCCTAACCCCATAT
CCTTGACCTTGAGCCCATACCCTGATATCCCTGACCCTGTCCCCATTCTC
AGCCCCCAGTTCCTGCTGGGCCCCCACTCATGGTTGGAGGAGGTGCCATC
CCCTGGACGCTGTAAGGCCACAAGGTTGCGGGGTTACTGCGCCCAACTGC
AGGAGTTCCGCACCCGCCTGAGCCAACTGGGCTGCCAGCTGTGAGCCCCT
GGGAGCCACTGGGAGCATGTTGGGTGCAGCTGGGACCATTCTGGGGGTGA
ACTGGTACCACTGTTGGATCAGTTGGGATCAATTGGGAATAAACTAGTGT
TGACTGGGACCGTGTTGTGACCAACTGGAAGTGTGTTGGAAGAAACTGAG
AGCTGCTGGGGTTGAGTGGGAGCAACTGGAACTGTGTTGGAACAAACAGG
GGACCAACTGGGATCACACTGTGGTCAGCTGGGATCACACTGGGTCAAAA
AAGATCACAGTGGCCCAATTGGGGTCATACTGGGGTGAGCTGGGATCAGA
ACGAGTTTAATAAACGTACAGTCGTCCGAGCCACCACAGAGTCAGCCCTC
CAGCGGCGCAGAGCGGCGCAGCGCGCACTGGCTGCCCGCGGTAAGCGGAT
GTGACGTCACTTCGCGGCGCGCTATTCGAACTCCAGCAGCGCCCCGCGGA
GCGCCCCAATGCCGCGGCCCAAACCGCGCAGCCCCCGGCGCCGGGGCCGC
CCCCCCCCGGCCGCCCCCCCGCCACCCCCCGCGCGGCCTCGCGGTGAGTG
CAGCCCGTAGGAGTGCGGAGTGTGGGGGCGGGGGGGGGGCGTCTGGAGC
GGAGCCTTTATCACCGCTGTTTTCCCGATTTCCCCGTCTTTTCGCCCCGT
TTCAGCCCGCCGGTACCGGCCCGGTCAGAGGGCGCTGCGGGAGATCCGCC
GCTATCAGAGCAGCACCGCTCTGCTGCTGCGCCGCCAGCCCTTCGCGCGC
GTGGTAACGGGACTGCCCCGGAACGGGACACCCCCCAACCCCCCCAACGG
GACCATCCCCCCACGGATGGATCCCCCCCCACACACATCCAACGTGGGAC
CCCCCGCCCCAAAATGAGATCTCAACGTGAGATCTGGGGGCCTCAAAATG
AGACACTCTCCCCCCTCCCCCAACGGAACACCCCGAAAATGGGACCACAC
ATAAAAGTGGGGACTCCCCTCCTCCCCCCCGCCCCGTCAAAATGGAACAC
CCCCAACTGGACCTTTCAAAAAATAACATTCCCCTCCCCCCAAAAATGGG
ACTTACCACAAAGTGGGATCTTCCCCCAAAATGAACACCCCCTCAAAATG
AGACCCCTCGGACCCCCCCCAACCCCTCTGCACCCATCNGCCGTCGTGCA
CGGAAGGGAAAGGCTGTAGGGTACATCTACCCTTATTTCTTGGGTTTGTG
TTTTGTTTTGTTGTTATTTAGAAGCAAAACCAAGACAACAAAGCCCAGCC
AATGCCATTTCCTGGCAGTGGACGCAGGCGCAGGCGGGTTGGTCACAAAG
CAAGAAGTTGCTGCGGGACTTTGTCGTTTTGGGGCCGTTCTCGTGAACTT
CTGAGCCATGGATGAGGAAATTACTTATGCTGATTTAAGGCATCCTACGG
GCAGTTTGCCTCCTGCTAAGCGGCAGCGCGGTAAGGGATGCTCTGTGTGG
TGGGTGCTCACCGCAGGCTTGGTTTGGGGGCTTGCTGTTCTCTGAGAAAC
ACCAGCAATGCTGGTTGGGTTCTGGGTCCACCCTGGCTTGTATGGGGGAG
TAAAGGAAGGGGTGGGGGAGAAGGAAGCCTGGGAATGGCCAGAGGTGTGG
TGGTTTT
```

FIGURE 10

SUITE 3

```
GTCCCTATTCCCATTGTGTCCTCACATCTGCCATCTCTTCCTGTCCCCAT
CTATGCTTTGTGCCCCCCATCCCTTACCCCATCCCCACGTGTCCCTGTGG
TGCCACCTCCACACGTGTCCCCGTGTCCCCACAGCGGGGCCGTGGCGCAA
TAACACTGTGATGTGGCGCTGCTGCCGGGACGGAGCGACGGCGCTGCCCA
TCCGTGCCACGTGCCAGCAGAGGGGACAGCGGGTGACGACGGCCGGGGGC
TGCCGAGACGCCTTCCTGCAGTGCTGTGAGGTGGCACAGAATCTGCGGCG
GAAGGGACAGCGCGGGGGGTTGGCACGGGGTGAGTGTCAGCAGTGTCCCC
AAAGCGGGGAGGGGTGACCTGGGGTGGTGGCGGTGGGGTGTGGGGGAGTT
GTAGAAATGGGGACCCCATTGGTGTGGGGAGGTTTGGATAAGGGGTCCCC
ATGGGTGGTGGCACATGGGGACATCCCATAGCCTGGGATCCCATGGTTGG
GGCCATCCCGTACCTGGGATCCCCACATGGGAGGATGTCCCCCGCTGTCC
CCATGGCAGTGATGGAGGCACAGCTGGCAGAGCAGCTGTTGGATGATGAT
GAGGACGTCCCCACGAGGAGCTTCTTCCCTGAGAGCTGGCTGTGGCGACG
CATCCATGTTGCTGGCACTGCACGGTGTGTCCCCGTGTGTCCCCATGTCC
CCATGTCCCCATGACTTTGTGTCCCCGTGTCCCCATCTCCCCATCTCCCC
AGGCTCTCAGTGCTGCTCCCTGACTCCATCACTACGTGGGAGATTCAGGC
AGTCGCCATCGTCCCTGGACATGGTGAGTGTCACCCCCTCCAATGGCCCT
GCAGTGTCCCCCTGACATCCCCCTCGTGGTGTCCCCATGTCCCCCACGTC
CCCAAGTTCCTATGGTGTCCCCATGTCCCCCCTCTCCCCCTCCCCCCGGA
ATGTCCCTGTGTCCCCGTGGTGTCCCTGCACTGCCCCGCAGTGATGAGGT
CCTGGCAGGGCTGTGCGTGGCGGAGCCGCAGCGGGTGACGGTGACACAGG
ACGTGCGTGTGGCGCTTTGGCTGCCCCCCAGCATCCGGCCCCTAGAGCAG
ATGCAGCTGCAGCCCCTCATCCACAGCAGACTGCCCCGCAGCATCAACGT
AAGCCCTATAGAGACCCCATAGGCACCCCAGAGATACCTCTTTCCCTCTA
ATAAATACCACTTTGCTTCCAATAGATAACCCTCCTGCCCCATAGGTACC
CCTGTGCTCCATACTTGCCCTGCCACAGCATACATACCCCTTTCCCTCCA
ACAGATATGCGTTGCCCCATAGATACCTTCTTTCTGCCCTATAGATAACC
CCTCATGCCCCACAGATTCCCGTTTCCTTTCAATTGGTACCCCCTGCCCC
TCATATATCCCCCTCTACCCCACGGATACCCCCTTAGACACCCGGTACCA
CTTCTGCCCCATGGATACCCCCTGTGGCACATAGATACCGCTTCTGCCCC
ACAGATACCCCCTTCCTACTCCACTGTCCCACAGCCCCCACTGCCCCATG
GCCACCCATAGCCTGGTGGCATCGGGTGACAGTGACGGTGATGCAGGTGA
CGGTGACACTGTCGGCAGTGGAGGGGGTGTGCGCGGCGCTGGATGGGGTC
CCCCAGATGCTGGAGCTGCCCCCGGGGAGGGCAGTGGCTGCACCCCTCAC
TCTGGTGGCCCTCCACCCTGGGGACATCCCCATCACCATCACCGCCCGCG
GGCCATGGGGGCTGGGGGACCGTGTCACCCGAGTCCTGCATGTCGAGGTG
AGATCAGTGGGGTCCCCTCCAGTCACCTGGGTCACCTCTGGGGTCCCTTA
AAGCCCTGCGACCTCCTGGACATTGTTGTCCTTGTGAGCCTGCGGTCACC
CTGAATACTGGGGCTGTCACTTTGAGGTTCATGGACACCATGTCCCTGTG
TCCATGGTGGCCCTGGACATGTTGGTCCTTATGGGATCTGGGGACATGGG
GTCCTTGGTGGTCCTGGATACTGCAGTTGTCCTTTTGTGGACACTATGTC
CCCATGTCCTTGGTGGGAATGGTGTCATCCATTCCCGCAGCCTGAGGGAG
AGCTGCACCTGGAGGAGAGCACCTACATCCTGGACGCAGATGGTGGGTGT
GAGGACTGGGGGACACTGGGGAAACTGGGGACGTGGGGCCGGACCCTGTG
GTGTGGTGTCCCTACAGATAAGCGGAGCCGGAGCCTGAAGCTGCCGGGGG
ACGTCCCTGCAGAGATCGTCCCTGATGGGGACTTCAGCATGAGCATCCGT
GTCAGTGGTGTGTGGGGATGGGGACATGGGGTGGGGACATGGGGGTGGGT
ACTGGGAACGTGGTGGGGATGTGGTGGTGGGCATAGGGGACATGGGGACA
TGGGAGGACATTTGTTGGGGACATTGATGTCCATCCCTGATCATCTCTCT
GTCCCTATGTCCCCATACCCATGTGTGTGGCCATGTCCGCACGCTGTGCC
CCTGTGTGTGTCCCCTGGGTGTCCCCACATGTGCTCACATCCTTATTACA
TCCCCACATCTCCTGTGTACAACCCCGTGTGCCCTGATGTGTGCCCCTCC
ACACATCCCCATGGGTGTCCCAATGTTCCCATGTCCCTCTGCTCATCCCC
ATCCACATCCCCATGCCTATCCCCTATCCCCACGTTCCCCCCATTTCCCA
TCCTATCCCCATGTCCCCATGTCCCATATCTCCATACCCCTGTGACCCCA
```

FIGURE 10

SUITE 4

A5FINB.txt

```
TATCCCTGTCCTTCAACTCCCCTCCCATCCCCACACCATCCCCATGTCTT
CTGTCCCCACACCATCCCCATATCCCCCTGTCCCCCCTGTCCCTGTCCCA
GGCCGGGTGCCGGGCTGGGCACTGCAGGGCGCTCTGGGGATAGGGGACTC
TCTGCTCCGCTCCCCCCGGGGCTGTGGGGAGCAGTCCCTGATGTCAATGG
CACCCACTGCTGCTGCTCTGCGCTTCCTGGATGAGAGCGAAGGGTGGGGG
CAGCTGCCCCCAGGGCACCGACAGCGCGGCCTCAGAACCCTGCAGCAGGG
TGAGCTATGGGGCAGGTTGTGCTTTATGGGGTGGGCAATGCTTTATGGGG
TGTGCAGTGCTCCAAGGGATGTGCAGTGCTTCATGGGGGATGCAGTGGGG
TTTGATTTGATTTGATTTATGGGTTTGCATTTCTCCTCCGAGGATTGCAT
CTCTCTATGGTGTTTGCAATGGGATGTGCAGTGCTCCAGGTGGAGGTGCA
GAGCCCTATGGGGGTGCAGTGCTGTGTAGGGGATGTCTGTGGTGTCCCCA
ATGGTCTCTGATGTCCCCACAGGCTTCGAACGGGTGCAGAGCTTCCGCAA
AAGTGACGGCTCCTATGGGGCATGGCTGCACCGGGACAGCAGCACCTGGT
GAGGGGAGCGGGGATGATGTGGGGACATGGGGATAGTGAGGGGATGTGGG
GATGCTGGGGTATGGGGATGTGAGGACATCATAGGGACATGAGCGGTGGG
GCCATGTGGATTTGGGGACGTGGTGACACGGTGTCCTGGTGCAGGCTGAC
GGCACTGGTGCTGCGTGTGCTGGCCCTGTCCCGGCCCTATTTGCCAGTGG
CTGCCAGCGGCCCCGCTGCGTCCCTGCGGTGGGTGCTGGGGCAGCAGCGC
CCAGATGGCGCCTTCTTGGAGCACAGGGCTGTGGTGCACCGTGAGATGCA
GGTGGGTGACACATCACTGCTGTGTGCAATGTCCCCATGCAGGATCTCCC
CCTGCAATGTCCCCTGAAGGTCCCTGCAGGCTGACCCCACATTACACTGT
GTCACTCACGTGTCCCCGTGTCCCCAGGGTGGTGTGGCAGACCCCGGCCC
GGAGGCCACCGTGTCGCTGACGGCCTTCGTGGTGGTGGCCCTCCATGGTG
CCCGCGCTCTGCTGCCCCCGGACAGCCCTGAGCTGCCCCTCCTGGTGAGT
CCCATGTCCCCACCCCTGTGTCTTGGTCCTCATATCCATGTGTCCCTTGT
GCCCCATCCCCCAAATCCCCACATCCCCCATATGTTCCCATACCCTGCTG
TGTCCCCCCAGTGTTCCCCCGTCTTTCATTCTCCACTATCCCCCGTATTC
CCATATGTCCCCCTGTCCACCAGTGTCCCCTCATCCCTCTGTGTCCCCCT
GTCCCCCAGTGTCCCCCACGTCCCTGTATGTCCCCATGTCTCCTAGTGTC
CCCCATGTCCGTGTCCTCCAGTATCCCCCATGCCTCCCCGTGTCTCTTCA
TGCCCCACACTCCACGTCCCCACACTCCATGTCCCACTGCCACAGGACAA
ATCCCTGTCCCGGGCCTCCACGTTCCTCCGGGGCCGCGTGGAGCAGTTGG
GGACCTATGGGACAGCCATTACATCCTATGCATTGGCACTGGTGGACACC
GCTCCTCCGGGGCCGCATCCGGCGGTGGAACGTCTGCGGGGCATGGCCCG
GAGCGCCCACGGTGCGTCTGTCTCTGTCCCCATGGGGTGGTGGCACCTCT
GTCCCCATGGCTGCCTCCTGGACCCCTCTGTCCCCTCCTTCAGATTCACT
CTCATTCGAATCCTTCAATTTTATTCTCCCTCAAACTCTTCTTCTTTGTA
TTCTTCACATTCATTCCTATTCAAATTGCTCTCCTTCCTGTCTGTTCTTC
TTCAAATTCTTCTTCAATTTTGTTCTCCTGATTAATTCTCTTAAAATTAA
CTCTCGATCAAGTTCTGCAGATTCGTTCCACTTCGGATGGATTCTTCTCC
AAACTGTTCTTCAGATTCACTCTCCTTCAATTTCGTTCTTGTAATTAATT
CTTCTTCAGAGTGATTCTTCAAACTCTTCTTCATGTTCTCTTCAAGTCCA
TTCCCTGCACTGACTCCGGGTGCTCAGGACCCCCCCGTGACCCCATATGA
CCCCATATGAACCCCCCATGACCTCCACAAAACCATATGACCCCGTGACC
TCCCATGACCCCTCATGACCCCATATGACCCCCCATGACCCCATCCCTGT
GCAGGTGGCCGTGCAACCTTCTGGCCATCCGGTGGCCCCGCAGCCACGGT
GGAGGCGACGGGTTACGCCCTTCTGGCACTGCTGCAGAGCCGCGACATCG
CCGGGGCTGCGAGGGCGGCACGGTGGCTCCGACAGCAGAGCAATTACGGG
GGTGGCTTCCACTCCACGCAGGTGGGTGGGGGTCACTGACCCCCCGGGTG
CCTCGGGGTGGGGGTGATTTGATCCCCAGGTACCTCTTTGGTGGCTGTGT
CCCCAACCTGCTTGGTGTTCCCGCAGGACACGCTGGTGGCCCTGGAGGCG
CTGGCCCAGATGTGGCTGCACTGGGGCCGTGGGAACACAATGGGGCTGAA
CCTGGGGCTCTCCTGGCCGGGGGGTGCCCGGGGGAGGGCTGGTGGCACTC
AGGTTATGCTGAAGCCGGGGCTGGAGCCGCTGGAGCAGGAGCTGCAGGTG
GGGACATGGCGGGATGTGGGGACACGAGGGATGTGAGGACACTGGGGACA
```

FIGURE 10

SUITE 5

A5FINB.txt

```
TGTCTGGACTTGGTAGGATGTAACATGAAGACACTGGGGACATGGTAGGA
CATGGGGGACATGAGAACACGGGATGTGGGGGACATGGTAGGACATGATG
GACACAGGGCTTTGGGGTCCTTGGGTCCTCGCTCTGTCCCCATGTCCCCA
GGTGCCTCTGGGCAGCCCAGTGACAGTGCAGGTGGAGGGACACGGCGAAG
GGACGCTGACGGTGGGTGGCTGCATGGACATTGGTGTCATCTCCAAGACC
GATGTCCCCTCACAACCTCCCCTCATGGTGTCCCCTCATGCTGCCACGGT
GTCCCCTGCTGTCCCATCATGGTGTCACGCTGTCCCCAGGTGCTCCGCCA
GTTCCGCCTGCTGTCACCTCCGAACGCCACGTGCCAGGCGCTGCACCTGG
AGGTGGCCATCACCGGCCCCATCCTGTACCATGGTGAGGCCCCACCCAAA
GGCCCCGCCCCCTTTTCCTCGCGGGGGGCGTGCCCTCAACCCTGTTTTGC
ATATCCCAACCCCCAGCAGATGAGGACTACGAGGACTACGAGGACTACGA
GGAGGCGGAGCCTAAGGAGGGGGAGGAGCCTACGGAAGGGGCAGTGCCCG
TGGAAGGGGCGGGGCCAGCAGATGACCCCGCCCCCCTCAGCCCCGTGTCC
TTATGGGATGCCCGTAAGCGGCAACGCCGCAGCACACATAACCCTGCCCA
CGAGGTGGCCTTCCTGGTCTGCTTCCGGTGAGGGGCGGAACTTCCTGTCC
CTGGGGGCGGGTCTTCCTGCTGATGGGCGTGGCTTATTGCTGAGGGGCGT
GGCCTGTTGTAGGCGGAGCCCAGGGGTGGCACTGACTGGGATGGCGGTGG
TGGAGATCACTCTGCTCAGTGGCTTCTCACCCCATAGAGCTGACCTGGAC
AAGGTAGGGGCCCAGGGGGACTTGTGGGACATGTTGGGGGGTTGAGGGGA
GTTATGGGGTGTGGGGTTTGGGGGTGTTGGAGTTGTTGAGGTGGCAGAAT
GTTTGGGTTGGAGTCATGGGATATGGGGCTATTGGGGTTTGAGGGTGTTG
TGATGTTGGGAAACATTGAATTGGGGTTGTTGAGTTTGAGGGTGTTGGGG
TGTGCGGGTGCAGAGCTGCAGCTGCTGGGTTGGAGTATTAAGGTGTTGGG
ATGTTGGGGTGTTGGATGGCTTGGATGCGGGTGTTGGGGTGGGCACGTAT
CTGGGTGCTGCTGTCCCACAACAGCTGCGGGACGTGGTGGATCACTGGAT
CAGTCACTATGAGTTGGAAGGAAACCAGTTGGTGCTATACCTGGATGAGG
TGTGTCCTCCCGTGTCACCCTATAACCCCAGTGGCCCCATGTTCTCATAT
CCCCCATGTCCCCGTGTCCCCACACCATATCCCATTCTCCCCACACATCC
CCGTGTTCCACCACGTGTCCTCATTTCTGTCCCTGTCCCCAGGTCCCCCC
CGAGCGGCAGTGTCTCAGTTTTGGGGCCACCCAGGACGCGGCTGTGGGTC
ACATGCAGCCGGCAATGGCAGCCATCTATGACTACTATGAGCCTGGTGGG
TGGGGCCTTCAGTGGGAGGGGCCTAAATGGGTGGTGGTCTTCATGGGTGT
GACCATTGGAGGAGGCGTGGCCGATCTGACCCCTCCATGCCCCATCCAGG
ACAGCGCTGCACCGTCTTCTACAACGCCCCCCAAAGGAGCAGCACCATCG
CCACACTGTGCTCCCCCAAAATCTGTGAATGCGCCCAAGGTAGGACCCCA
CTGTGACTCCATATGTAGGGCCCCCATCCAGTGAACCCCCACATCCTCCT
CCTAATTTTTGAAGATCTGGGGGTGAAATTATGGGGTTTATAGGGGAGCG
TGGTTGAGTGACATGCAGGACATGGAGGGAACCCACACCAAGAACCTTGT
GTTTTGGGTCCCTGATGATGTTGGGAGATCCTATTGATGTTGGTGGTCCC
CAGGGGGGTGTCCCCAAGCCCAAAGGAGGACACAGGAGGTGACAGCTGAT
GACCGCCATGACTTTGCCTGCTACAGCCCCCGCGTGGACTATGGTGAGAT
CCCAAATCACTGCACCTCAAACCTGACCCCAAATTGGCTGCATCCCGAAC
CCCAACTGCCCTAAATCCCATCTGCTGCCCCTGAGTCCCACAGCTGCACA
CTGTACCCCACAAGTGGCCCCTGAAGCCTAAAAACATTCACGAGGATTTT
GTAGTTTTCTCCCTGTACCCCAGTTGTCCCTCTGACCCCAAGAACCCCAC
AGCTGCCCTATGCTGTCCCCTGCCCGCCATAACTCCTCTGATACAATAAC
CCCCGTGACCCCATCTTTATGACCTCCATGACCTTTGACCCCCAGCACTG
GTGGTTCGGGTGCTGTCCCAGAGTGAGATAGGGGCTTTTGTGGCGTTTGA
GACGGAAATCAAGGAGGTGCTGCTTGAAGGTGAGACTGAGGGTAGTGGGA
CGGACTGGAAGGTGAGAATGGGAGCACTGGGAGAGGCAGGGAGTACTGAG
AGGGACTGGGAATGACTGGAAATTGAGACTGGGTGGACTGGGAACTCTGG
TAGAGACTGAATGGGTATACTGGGAACACTGGAAGAAGTTGTGGGATGAG
AAGAGGATGCTGGGATAGGAGACCCCCCCCCTTGTGCTAGGGGGGTCTCT
CAGCCATACTGGCACAATATGAGAGTATACTGGGTGGTACTGGGAAAGCT
GGGAGGACTCATACTGGT
```

FIGURE 10

SUITE 6

A5FINB.txt

```
CCCCTGGGGAGCGGAGGCGGCTGCTGGTGCGGAAGAGCTGCCCACTGCGC
CTGCAACTCCACAACATCTACCTGGTGATGGGGGCAGCGGGAGGACGCG
GGACCCTGAGGGGCGGTGAGAAGGGGCTGTGCCCCATGTCCACATGTCCC
TGTGTTCTCATGTTCCCATGTCCCATATCCCAGTGTTCCTAACCCCATAT
CCTTGACCTTGAGCCCATACCCTGATATCCCTGACCCTGTCCCCATTCTC
AGCCCCCAGTTCCTGCTGGGCCCCCACTCATGGTTGGAGGAGGTGCCATC
CCCTGGACGCTGTAAGGCCACAAGGTTGCGGGGTTACTGCGCCCAACTGC
AGGAGTTCCGCACCCGCCTGAGCCAACTGGGCTGCCAGCTGTGAGCCCCT
GGGAGCCACTGGGAGCATGTTGGGTGCAGCTGGGACCATTCTGGGGGTGA
ACTGGTACCACTGTTGGATCAGTTGGGATCAATTGGGAATAAACTAGTGT
TGACTGGGACCGTGTTGTGACCAACTGGAAGTGTGTTGGAAGAAACTGAG
AGCTGCTGGGGTTGAGTGGGAGCAACTGGAACTGTGTTGGAACAAACAGG
GGACCAACTGGGATCACACTGTGGTCAGCTGGGATCACACTGGGTCAAAA
AAGATCACAGTGGCCCAATTGGGGTCATACTGGGGTGAGCTGGGATCAGA
ACGAGTTTAATAAACGTACAGTCGTCCGAGCCACCACAGAGTCAGCCCTC
CAGCGGCGCAGAGCGGCGCAGCGCGCACTGGCTGCCCGCGGTAAGCGGAT
GTGACGTCACTTCGCGGCGCGCTATTCGAACTCCAGCAGCGCCCCGCGGA
GCGCCCCAATGCCGCGGCCCAAACCGCGCAGCCCCCGGCGCCGGGGCCGC
CCCCCCCCGGCCGCCCCCCCGCCACCCCCCGCGCGGCCTCGCGGTGAGTG
CAGCCCGTAGGAGTGCGGAGTGTGGGGGCGGGGGGGGGGCGTCTGGAGC
GGAGCCTTTATCACCGCTGTTTTCCCGATTTCCCCGTCTTTTCGCCCCGT
TTCAGCCCGCCGGTACCGGCCCGGTCAGAGGGCGCTGCGGGAGATCCGCC
GCTATCAGAGCAGCACCGCTCTGCTGCTGCGCCGCCAGCCCTTCGCGCGC
GTGGTAACGGGACTGCCCCGGAACGGGACACCCCCCAACCCCCCCAACGG
GACCATCCCCCCACGGATGGATCCCCCCCCACACACATCCAACGTGGGAC
CCCCCGCCCCAAAATGAGATCTCAACGTGAGATCTGGGGGCCTCAAAATG
AGACACTCTCCCCCCTCCCCCAACGGAACACCCCGAAAATGGGACCACAC
ATAAAAGTGGGGACTCCCCTCCTCCCCCCCGCCCCGTCAAAATGGAACAC
CCCCAACTGGACCTTTCAAAAAATAACATTCCCCTCCCCCCAAAAATGGG
ACTTACCACAAAGTGGGATCTTCCCCCAAAATGAACACCCCCTCAAAATG
AGACCCCTCGGACCCCCCCCAACCCCTCTGCACCCATCNGCCGTCGTGCA
CGGAAGGGAAAGGCTGTAGGGTACATCTACCCTTATTTCTTGGGTTTGTG
TTTTGTTTTGTTGTTATTTAGAAGCAAAACCAAGACAACAAAGCCCAGCC
AATGCCATTTCCTGGCAGTGGACGCAGGCGCAGGCGGGTTGGTCACAAAG
CAAGAAGTTGCTGCGGGACTTTGTCGTTTTGGGGCCGTTCTCGTGAACTT
CTGAGCCATGGATGAGGAAATTACTTATGCTGATTTAAGGCATCCTACGG
GCAGTTTGCCTCCTGCTAAGCGGCAGCGCGGTAAGGGATGCTCTGTGTGG
TGGGTGCTCACCGCAGGCTTGGTTTGGGGGCTTGCTGTTCTCTGAGAAAC
ACCAGCAATGCTGGTTGGGTTCTGGGTCCACCCTGGCTTGTATGGGGGAG
TAAAGGAAGGGGTGGGGGAGAAGGAAGCCTGGGAATGGCCAGAGGTGTGG
TGGTTTT
```

FIGURE 10

SUITE 7

Conti131.txt

```
AGAAGAGCCCCGTGATGTCCTCCAGGTGCGGTCCCTCGGTGCCTGTGGGG
ACAACGACAGCCCTAAGCACAGTGTCACCATCCTGGGTGGGGTCCCCAAC
CCAAATCCATGATCTCCCATTGTCCCAGGCCATGGTCCTGATGTCCCTCA
GACCCTCCTAACCATGGTCCCAGCATCCCAATACCTCCACGTGTTTCCAA
TATCCCCACATCCCCCCTCACCAGCCAGGAGCAGTCGGACGGAGACACGC
ATTGGTTTGGCCAGTGCAGTGTGGGTGACAACGCAGCTGTAGATGTCCCC
GTGGTGTTGGGGGCGTGCGGGGATCAGCCGTGCTGCCGCCGTCCGGCTGT
AGGTTCCATCGGCTGCCTGGCGGTGACCTGAAGTCCAGCTGTCCATCACT
GTGTCCCTGGGTGACTGTGATGTCCCCGAGCCCCCGGCGCGGCGCTGCCA
CGTCACCGTCACATCCAAGGGGTAGAAGCCAGACACGTGGCAGCGTAGCT
CTGCTGACGTCCCCGGGGCCACCACCAGGTTCTTCGGGGACAGCGTCACC
TTGGGGGGCTCTGGGAGACATGTGGGGGGACATCGGTCCCATATAGCCCA
TAGGGCCCCTCCTATAGGGCTCATCCCCCCCTATAAACCTACAGGTGAAC
TATGGGATGATGCCACCCCATCCTATAGTCCTCATAGGAATACCACCCGG
TCCCATCCACCCTATAGCCTCCATAGGAATACCACCCAGTCCCATCCACC
CTACAGCCCCCCACAGGAATATCACCCAGTCCCATCCACCCTACAGCCCC
CATAGGAATACCGCCTGCTCCCATATGTCCTATCTGACCAATAGGAATAC
CACCCAGTCATACACACTCCGTAGGAACACTGCCCAACCCCACACCCCAT
AGGAACACCGCCTGCCCCACATGGACGCACCAAAGACGTGGAGCTGCAGC
ACTGTCTGTGTGTGCCCGTGGGGCAGGAACACGGAGCAGATGTAGGTGCC
CTCATCCCCCGGTGATGGCCGCGCCAGCCGCAGTGTCACCGCTGTCACCC
CGTCCCCATCCCGTGTCCCCAGCAGCAGTTCGGCCCCGGGGGTGGCGCGG
GGGGCGCGGGCGGTGGAACTGTCATAGG
```

FIGURE 10

SUITE 8

AB1B3FOR.txt

```
CCAACTTCCTTTGGTTCAGGGAAGAAGACTCACCCACTGCTTTGGTTTGT
TGCACTGGAAAAGCATGAAGAAAGCACCACATGATGAGAGGAACAGTTCA
TCCCACAGCTCACGCAGGAAGAACCCATTTTTAATTTAATTTGGGAGGGA
GCACTCACCCAGGTCTGAAGCTAGTTTATCTGCAATGAAACAAATAAGAA
ATGCATGATGAGAAGGGTCAGAATATCATCCCATGGCTGATCCCATGGGA
AGACCCCGAATCTCTTTGGTTTGCGGAGGAGGACTCACCCAACTGTGCAT
TCCTTCCCTCTGCAAAGGGAAAGCAGAAACAGTG
```

FIGURE 10

SUITE 9

~~AB1C1FOR~~.txt

```
TGGGATCAAGTTGAGTAGACATAGCATCCTCGCTTTTAGACAAGACCTGC
ACAGTATACCACCGTTTACTGTGCAGATAATGACCAAAAGCAATATGCGT
CACACTTTTCTGGTGACAACGTCACAAAATGGCGGTCGTCAATCGTGACG
AACAGCACAAACGCCCTTTCTCATCGAAGATTTCAATCTGCCAGACCTGG
TGACGCGAACCGAGATGCAACGGTTTGCATACGCCGCGCACCCGCCCTTC
TCGTGCCGAGCGGACGTGGTTAGCATTGATTTCCAGACCAACCACTTTTT
GCTCACCTTCGGTACATAAATAACCGGCAACGGAACCGATACTTTCGGCC
ATTACCACGGGTGCTCCTCCATGCAGCAACCCGAAAGGCTGCTTTGTCCG
CGAGTCTACTGGCATTGTCGCTTCAAGGGTGTCATCACCAATATGTTCAA
AGCGAATATCCAGGAACCCCACCATGTTTCCTTCACCCATAGCATTCAGT
GCTTCCAGGGTGATTTTCCGTTTCCAGATCATTTAATAATCTCCAGTTAA
AGCCTGCACAGGATGGCTTACCCCGTGCCTTCAACCCGTTTTATCTGGCT
ACGGCAAGGAATATCCGGTT
```

FIGURE 10

SUITE 10

AB3A11RE.txt

```
CCGTCGCCTCGGCTCTCCCTCGGGCTCCACCCCCCCGTTCCGCCCCTTTG
CCGCCGCATCTCCCGCTCTGTACCCTCCCCAAGAAGTCGCTCAGACGGCG
TCGCGTTGTCTGCACATCCTCGGGGACCGTCTGTTGTGCGGCAGCAGGGG
AGGGGAGCGGGCGGTCTGTGCTCTTCTATTCCCTTCAGTACAAGAAGGTG
GTTTGGGTTCTTTAACCAAATATACTCTTTTGTTTTTGCATAAAATCACC
AGAAGGAATTGGTCTGTTGAATATATAGGAGTGGTGGAGAGAGTCGAAGA
AGTGTTTCCTGTGACAAAACACCGTTAAAAGTGAATTCATGGAGAACGCA
CTGCAGTGACACAGAAGGGAAAACACGAAACATAAATAATTTGCCGATTT
ATCATCGATTTCAGGTCCTTTGGGCTGATTGCTTTCCCAGTATTTCCCT
TTGGAGAAAAACCGGTGAAAAATGG
```

FIGURE 10

SUITE 11

AB5B6FOR.txt

```
TCACCTGGCTTTGCTGCTCCAGACCCCGCAGGAAGCGACCCCCCTGGCCC
CTGGCATCCCGCAGCCCCACACGCAGCTGTGCACGGCCCCACACTGGCGC
CCCATCTGGGAATCTGGGGGTCCAAAGGGTCAGTGGAGTCAGGCGGGTCC
AAAGGTCAGTGCGGTCAGGAGGTCCCCAGATGTCAATAGGGTCAGGGGGA
GGGATCCCAAAGGCCAATAAGGTCAAGGGGAGAGATTCCAAAGGTCAGTA
GGGTCAAGGTGCCCCAGAGGTCAATAGGGTTGGGGGAACCCAAAGATTAT
AGGGTCAAGGAGTGACCCCAAAGGACATCAGGGCCACTGATTTGGGGTGG
ATGGGAGAGGAATTTGGGGAGTTCAGGAGAGTTGGAGGGGATTTGGGAGG
TTTTGGAGGAGACAGATGGGGATTTTGGTGGGAATTTGGGGAAGATTGGG
TGGGATTTGGGATTTGGGTGGGATTTAGGTGGGGATTTGGGGGGATTTTG
TCTCTGGGTGTCCCATAC
```

FIGURE 10

SUITE 12

AB6E4FOR.txt

CCTGAAACTTTGGGGTGAGCATCTCCATCAGCTCATCTGCAATGCAATGG
GATCTTCCAGTCTTTGGGTTTTGTGCTCGTTGTGCCACTATTTTCATGGC
ATCCTAAGATGGTGCTGTATTATTTTTGTGACACTGTAAGAGACTGGAGC
AGAAATTTTGTCACAAATTAACAAAAAAAAAAAAAAAAAAAAAA

FIGURE 10

SUITE 13

AB6G8REV.txt

```
GTTCTATGATTTCTTTGGTCCGAATACCATGAAATCTGATATTTCCATTT
CAGTATCTGAACTGGGTTCTCTGCTGGATCACAGTGGTCCACACAAAGAA
GCAGAACAGTATATCGCTCGCGTCTTTAACGCAGACCGCAGCTACATGGT
GACCAACGGTACTTCCACTGCGAACAAAATTGTTGGTATGTACTCTGCTC
CAGCAGGCAGCACCATTCTGATTGACCGTAACTGCCACAAATCGCTGACC
CACCTGATGATGATGAGCGATGTTACGCCAATCTATTTCCGCCCGACCCG
TAACGCTTACGGTATTCTTGGTGGTATCCCACAGAGTGAATTCCAGCACG
CTACCATTGCTAAGCGCGTGAAAGAAACACCAAACGCAACCTGGCCGGTA
CATGCTGTAATTACCAACTCTACCTATGATGGTCTGCTGTACAACACCGA
CTTCATCAAGAAAACACTGGATGTGAAATCCATCCACTTTGACTCCGCGT
GGGTGCCTTACACCAACTTCTCACCGATTTACGAAGGTAAATGCGGTATG
AGCGGTGGCCGTGTAGAAGGGAAAGTGATTTACGAAACCCAGTCCACTCA
CAAACTGCTGGCGGCGTTCTCTCAGGCTTCCATGATCCACGTTTAAGGTG
ACGTTAAACGAAAGAAACCTTTAACGAAAGCCTACATGATGCACAACAAC
AACTTCTCCG
```

FIGURE 10

SUITE 14

B5FOR.txt

```
CCACCACCGCTTTGGGCAGTGCCAGTGCTCCTCACAGGCTGTGGGGCAGA
GCAGGTGACCCCCCAAGGATTTCCCCTACAAAGAGCCCCACAGAGACAGA
AATCCTTCACCTGAGCTGCAGCAAGCGCGCGGCTACACCCAGCATCAATC
TTTGCCCAGCTTCTACCTTTGCCCAGCTTCTACCTTTGCCCAGCTCCAGG
GTGCAATGCGAGCAACTTGGCATCAGACCAATACAGTCAAAGGTTGGAGA
ACATAAAACACATCCCATTGCAGCTTTGTGCACCACCCTGGGTCTCTGCT
ATCACCAGGAACATGGACACAGGAGAAGCTTTGCCATAGCACAGGAGAAA
GCTGTGCGCTGCACTTCATGAGCATTTCTCTCAATTTCTCCTGTATCCCA
CAGGTTACAGGCACCAGTAATTCTGCCAGAGCTATTCTGAAGGGCACGTG
GTGAAGGATTATGGCTTGGAGCAGTGGGGAGAGCCAAAAGCCCTTCCCAC
ACTTGATGCACTCCAAGGGTGTGATCCCAGCATGCAGCCTCTCATGTTGG
AATGGTCAATTTTATCCTAAAATCCTCTTGCACTTGGAGCAATGTTGAGT
TATTTTCCCCATGTGCATTCACAGTGAGGTCCCCCTGAAGCCTACTCTTC
TCCAGCCAATTTCTTATGATCACGAAGGGGATGATATGATGGTGACATGG
GGGATTTCCACGTGGATGCTGCAGGGCAGATGGGGAAGGGGTGAGGGGAG
ATGCCCACCAGCAGAGTTCCCAATCAGGACACAGCAGTTTTGCTGCCAGC
ACCAGGAAGCAGCTTCCCCTCCTTTCCCTGCTGGGAAATCACTCCTTTGG
AATGTTTTTTTTTTTCTGCTGCTCACCCACATTTTGCACAGGGCTGATCT
TCCAGGTCAGCCCAAACTCTGCATCCCCGCACGGATAACCTCTCCCTCCC
TAAGAATCAGTGCATCCTGCCTGCCTGCAAAGCAGCTGCTGAGATGTCTT
TTGCAGCCCTTATTCCCGCAGACCCCGTGCAGAACCACACACATCTCCAT
CCTCTCCTCCGTTGGCAAGGAATGGGTTTGCAAAGGGATGGGCACAACCA
GCAATATGCAAAGGAAGAGGTGTCGAAAGTCTGGGGAGCAATGAATCTGT
CCCCCGGAAGATGTTTCCATGGGGCAGTTAAGGAGGAGAATTGGAAATGA
AGCAGATGATGCAGCAATGAAACTATCCCAGAAAAGGGGGGAAAAGCAAT
TCTGGTAATGAAGATACATAAAGGAGAAGGGCTTCTCGCTGTCTGGACGC
AGTTCTGTTGGTTAACGTCTTTTCTCTTTGTGCTCTTTGCACTTTTTTCT
TTGCCTGCTCTGGTCAGGATGAGGCAGAGCCCTCACGGGGCCCTTTCACA
CCTTTTTTTAGCACACAGAAGCGCAGCGGCCGTCTCAGCACCCAGCATCG
ATGAGAAGGGACTGCAAATAAATTAAATGCGTTACTGAATAGACAGTCGT
AATTAAAAGTCAAACCCATCCCCTCCCAGTATTCCAGCTGCCGAGGCATC
GGTTGGCACAGAATCACCAAATATTGCCTTTCTTCCCCCATCCCCGCTTA
TCAGCCAATGCTCTCTGACCCCTAAAAGGTCTCGATTTGGGGTCTTTTTG
TTGTTGTTGTTGTTGTTCTGGGTATTTTTAGGCTTTTATTATCAGCGATT
TTTCAGCTTCTCACTGCTTACCCCCCAGCTCAGCACCGCATCGCTCACTG
CCATCGCTGAACCCAGCGGCGTTTCCATCCCTCAGAGAGCAGCAAAATGA
GACATCGGCCGTCGTGCACGGAAGGGAAAGGCTGTAGGGTACATCTACCC
TTATTTCTTGGGTTTGTGTTTTGTTTTGTTGTTATTTAGAAGCAAAACCA
AGACAACAAAGCCCAGCCAATGCCATTTCCTGGCAGTGGACGCAGGCGCA
GGCGGGTTGGTCACAAAGCAAGAAGTTGCTGCGGGACTTTGTCGTTTTGG
GGCCGTTCTCGTGAACTTCTGAGCCATGGATGAGGAAATTACTTATGCTG
ATTTAAGGCATCCTACGGGCAGTTTGCCTCCTGCTAAGCGGCAGCGCGGT
AAGGGATGCTCTGTGTGGTGGGTGCTCACCGCAGGCTTGGTTTGGGGGCT
TGCTGTTCTCTGAGAAACACCAGCAATGCTGGTTGGGTTCTGGGTCCACC
CTGGCTTGTATGGGGGAGTAAAGGAAGGGGTGGGGGAGAAGGAAGCCTGG
GAATGGCCAGAGGTGTGGTGGTTTTGAGCAAAAATCAGCCCAGATCGGGA
AGCCCAATGTGAGAGAATGGAATGAAATGGTGGCAAACGCACCCTGCATC
CACGTGGCATGAGGGCTGCAGACATCCCCGCCCTCCCAGCCACCGGCTGC
CCCACACTGGGCTCAGCTCACAAAGCCTGGGGGCTGCTCAGCTTCCACCC
CATGCTCTATGGAGCCTGCAGGGCCTCCACCACCTCCAGAACCACACGTG
GAGGTGATGTCCCTGTGTCCATCTGACCTCCAGCGGGAGCCCATCCCATG
CTCCCTGCTGCTGTCACCCCTCTGTGCCACCTCCTTCCCAGCTGGGAACC
ACTGGGAGCCACTGGGAAGGGTCCAGGGGACCCTGGAACTGGAGGAAAAC
AAACAGGCATCAACTTCTGCTCATACACAGCATGGGAACCAATGGGAAGG
GTCCGGGGACCCCAAATTCTGAAGGAAGCAAAGCACCCATCAGCTACGG
```

FIGURE 10

SUITE 15

B5FOR.txt

FIGURE 10

SUITE 16

```
ATTTGTTGTTCAGCAGAATGCATCTGTGTGCCCCATCCCCACTCCACTTC
ATTTCCTTTCTTTTCCTGCAATAGGAAATCCATCTTGGAGGGGACGGGGA
CACAGGCAGGCTCACAGAGGGGACCCTGGGGTAGCAGTGCCGGATTTGGG
CTGAGGCCCATAGCAGTGACCACAGAATCGGTCATTTGTCCGTTCATGGT
GAAGATGGGAGGGGGTTCAGCAGAAGCACTCCCTGGGACTCCCAGAGGGC
TGTCTCAGAACCGCTGCTTTCCTTGCACAGAAGATGAACCATTTTTGTAG
GGGGAGGGTCCAGGATGTGGTTGCAGTGTGAACAAAGCCTGTGTGCTTTT
ATAATTCTCTTCCTGCCTGCTGCTGTCATTTCTGAGGGCTGAATGGGCAG
CACGGGCAGACAGCAGCGTGGCTCCGACACTTCTATGTCTGCAGTGCCCA
TTGCAGGAAGAGAAAAGAAATGGAGTGGGGATGGGGCAAACAGATGCATT
CTGCTGAACAACAAATCCGGTATTTTTTTATTGAGAGAAATAACACAGGA
TTGTGAGCTGATTGCATGAGCGCATGCAGCGATGTCCCCCCGTGTGCCCG
GGCAGTGCTGGGGTCTGCACAGCCCAAACTCCTCACAGAGCCGTATTGCA
GAGCTTCACCCCAACGCCTGGGGCTTTTGGGGTGGGCACACATCAGAGGG
AGGGACTGCGTTGCCCTCCATCTCCTGCACATTATGGATGGAGACGTAAA
GGTTCTTTCTGGCAGACCCACTGGTGTTCACCACTACAGACGTCGCCCTC
CACTTTTGTGTTCTTGAAGGTCCCGCAGCGATTCTCCATCACGGAAAGGT
TATCAGACCTGCAAAATAAGGCTGTTTGCACCCAAACACCCGACTTGAAG
GAGGCGGGCAATGGTTGCAGAAATACTCACTCTGTGCTGTTGTAGGAGGA
GTTGTCCACCCATTTCCATTGATTTGTGGACACTTCTAATCCAATCCACA
CCGGCTCCGCACCTGCCATCTGCTGGAGGTGATCCTGGGAAATGGCACCA
AAATCCTTCTGCAAGGGGCTGGAGGGGTGCAGAGCCACCAAGTCTGCCTT
GTTGGACCCCCAGCAGATGGGACTCAGACAGCAGCCATGCCTGGAATGCT
GCCTGGCTCTGCAGGCGGCTCAATGGGTGGGAATGGCTTCAAACCCGAGA
TGGAGGCACCGGTGTGACCAGCTGAGCTCTGCTTCCATCCTTCAGCCTGT
TTGAAGGGTGGGAGGGGACACAACCCCCCATGTCCCACCCCTAGCCTGAAC
CTTGATGTCCTTAACTCAAACCATAATGTGCGCAACCCCAGCGTGCCTGA
CCCCAACCCGTGTGCCTACTGCCATGTGTTGACCCCTAACCCTAAAGGGC
ATAATCCAGACCCCAATCTCTCCAGTGATGCTTTAGCCCCATTTGGGTTT
GGAACCACTGACCCTCCTGCTGCCGCCCAGTCACTCCAGAGCGGTTTTCT
CCCACAGAATCCACCAAACCCACACATTTTCAGGTCCCGTCCAGCTCCCT
GCTCTATGCTTACCTCTTCTGCCTTCTTCCGGAGCACAGCCAGCTGAGAC
TGCAGATTTTCACACTTCATTTTTGCTTGTGTCCAGTTCCCCTTTTCTGT
GGAAAGCTCATAGCATCGGTCCCCTAAAAGCCTCCAGAACTGGGGACAGA
GCAGGCAGGCAGCAGGGGCTGGAGAGAAAGAGCCGTGAGCATCTTCAGGT
GGGAGAAATCCCACCCAGGAGGATTTCCTTGGGAAGGGCATTACCTGCAG
AGCTGTTCCATGTGGATTGGCAGAAGTACTGCTCAATGGAGGTATTCTCG
CAGAGCTCTGTCCCATTCCTCCCGTTGGTCTCAGGGCAGTGCCGGGCAGC
GCTTGGAGGTGGTGTTGTTTTCTGAAAGACTTTTGGGCACAACCTGGGGT
GAGACGCGGCCCTATGGGGCCAACCCCGTGGAAACCACGCAGGGTTGGGG
TTGGATCCTCGAGCTCTTTTGCAAAGCCTTTCTGGCTATGGTTGCACTCA
GTTAATTAAACTGTCTAAAACCATATTTTGTATATAATTAGACATGATGT
TTACTGCTTCTGTCCCCCCCTTGGTTTAAGAGCAGAGAGGCTCTTGCAGA
AGGGAATTCCTCTCACTGAGTGCCACTTTGGAATTGTTGTGTGATCACCC
AAACTCCAGTGCAAAGCCCCAGCCCCACTTTGGGCAGAATGAATGTGTTT
TCTGCTCAGAAGAGCTTCGATTTCCTGTGCAGCAATGTGGTTGGGATCTG
ATCACTCACCGCACACGCTGAGCCCTGTCACCAGCAGCAGCAGCAGCAGC
AGCAGCACCCCCAGCATGCAGGCTTTCTGGAAGTCCCACGGAACTGGAAG
AGCCCACACTTATATAAAACAGACATTTTGAAAAAACTTTTCCTTTTACA
GAAATGATCTCCCTGTGAAAGAGCCCCTCCACCAACCTGCTACGTTAGAG
CAGAAGTTGATGGCTGCTTTGGTTCCTTGAGAATTTGGGGTCCCCGGACC
CTTCCCATTGGTTCCCATGCTGTGTATGAGCAGAAGTTGATGCCTGTTTG
TTTTCCTCCAGTTCCGGGGTCCCCTGGACCCTTCCCAGTGGCTCCCAGTG
GTTCCCAGCTGGGAAGGAGGTGGCACAGAGGGGTGACAGCAGCAGGGAGC
ATGGGATGGGCTCCCGCTGGAGGTCAGATGGACACAGGGACATCACCTGC
```

B5FOR.txt

```
ACGCGTGGTTCTGGAGGTGGTGGAGGCCCTGCAGGCTCCATAGAGCATGG
GGTGGAAGCTGAGCAGCCCCCAGGCTTTGTGAGCCGAGCCCAGTGTGGGG
CAGCCGGTGGCTGGGAGGGCGGGGATGTCTGCAGCC
```

FIGURE 10

SUITE 17

B5REV.txt

```
CCCAGAACCCAACCAGCATTGCTGGTGTTTCTCAGAGAACAGCAAGCCCC
CAAACCAAGCCTGCGGTGAGCACCCACCACACAGAGCATCCCTTACCGCG
CTGCCGCTTAGCAGGAGGCAAACTGCCCGTAGGATGCCTTAAATCAGCAT
AAGTAATTTCCTCATCCATGGCTCAGAAGTTCACGAGAACGGCCCCAAAA
CGACAAAGTCCCGCAGCAACTTCTTGCTTTGTGACCAACCCGCCTGCGCC
TGCGTCCACTGCCAGGAAATGGCATTGGCTGGGCTTTGTTGTCTTGGTTT
TGCTTTTAAATAACAACAAAACAAAACACAAACCCAAGAAATAAGGGTAG
ATGTACCCTACAGCCTTTCCCTTCCGTGCGCAACGGCCGATGTCTCATTT
TGCTGCTCTCTGAGGGATGGAAACGCCGCTGGGTTCAGCGATGGCAGTGA
GCGACGCGGTGCTGAGCTGGGGGGTAAGCAGTGAGAAGCTGAAAAATCGC
TGATAATAAAAGCCTAAAAATACCCAGAACAACAACAACAACAACAAAAA
GACCCCAAATCGAGACCTTTTAGGGGTCAGAGAGCATTGGCTGATAAGCG
GGGATGGGGGAAGAAAGGCAATATTTGGTGATTCTGTGCCAACCGATGCC
TCGGCAGCTGGAATACTGGGAGGGGATGGGTTTGACTTTTAATTACGGCT
GTCTATTCAGTAAGGCATTTAATTTATTTGCAGTCCCTTCTCTTCCATGC
TGGGTGCTGAGACGGCCGCTGCGCTTCTGTGTGCTAAAAAAAGGTGTGAA
AGGGCCCCGTGAGGGCTCTGCCTCATCCTGACCAGAGCAGGCAAAGAAAA
AAGTGCAAAGAGCACAAAGAGAAAAGACGTTAACCAACAGAACTGCGTCC
AGACAGCGAGAAGCCCTTCTCCTTTATGTATCTTCATTACCAGAATTGCT
TTTTCCCCCTTTTCTGGGATAGTTTCATTGCTGCATCATCTGCTTCATTT
CCAATTCCCCTCCTTAACTGCCCCATGGAAACATCTTCCGGGGGACAGAT
TCATTGCTCCCCAGACTTTCGACACCTCTTCCTTTGCATATTGCTGGTTG
TGCCCATCCCTTTGCAAACCCATTCCTTGCCAACGGAGGAGAGGATGGAG
ATGTGTGTGGTTCTGTACGGGGTCTGCAGGAATAAGGGCTGCAAAAGACA
TCTCAGCAGCTGCTTTGCAGGCAGGCAGGATGCACTGATTCTTAGGGAGG
GAGAGGTTATCTGTGCGGGGATGCAGAGTTTGGGCTGACCTGGAAGATCA
GCCCTGTGCAAAATGTGGGTGAGCAGCAGAAAAAAAAAAAAAAAACATTC
CAAAGGAGTGATTTCCCAGCAGGGAAAGGAGGGGAAGCTGCTTCCTGGTG
CTGGCAGCAAAACTGCTGTGTCCTCCATGGGAACTCTGCTGGTGGGCATC
TCCCCTCACCCCTTCCTCATCTGCCCTGCAGCATCCACGTGGAAATCCCC
CCTGAAAAAGCCCATTTTGTGACCATGCATCACATTTATTTTCGCATTCA
GCATCAGACGGACACAGGCAATGGGTTGGGGGATGGGGGGGGGGTCTGAG
GGTATATCTTTTTGCTGAGCCAGGTTTTGAGTCATGGGGGATAATTTCAT
TCCAAGGGGAGGGGGGCATTTAACTGCAGGTGGTAACAATGAAAGGCAGT
GGGAGTTGTTGTGATTGCATGGGGGAAAGCACTGGTTTTTTCCATAAATT
GGGACTGATGTGGCTGTTGTTGCTTATTTTTATGGGGGAGGGTTGTGGGG
TTTTTTTCCCCTATATTACATTGCATTTAATTTCAGTCCTCTCTCATTGT
CTATCCCTGGCAATGCTAGGACTTCTCCTTGCTGTTTTCTGTTGGGCGAT
CATTGCCACAGAGGGAGGAATTGCTTTTCATTTGGGTCACTGCAATGAGT
TTTAGCACCCAGAAATATATCCTTATGGGTCTCTGCTTTTGGGCACTGC
TGATGGGTGGAAGTTTTGGTTTGCAGGTGAAGTGGAAGCCCCAAAATGGA
GGAAGTGAGGGAATATCCCCATGTTTTGGGCACAGAATGGAGCAGGAGGG
AAGGTAACAGCCGAGCCATGCCCTTAACACATCTGTTTATTGTTATTATT
ATTGTTATTATTTTATTGATTACTTCTTTAACTTGAGAACAAAGGGGAGG
GATGTGGGTGGGAAGAAAATGAGTCTCATTTCTTTTAGCACTTCCCTCAA
GGGGAAAATTTGTGTTGGTTGTTGAGCAGCAGGTGGACTTCTTGCTGTGA
GCAGCCACATTTTGGAAGAGTTCTGTTGTTATTAGCATTATTTATGCGAT
TCTGTGATGTTTTTATTATAATTAATTGTAATGAATCCTCCCTGAGGCAC
TGGATGGGGGAAAAAAAAACAACATTTTGGGGTCTACTGCTCACACCTGG
GGTGCACTGTTGCCCATTGGAGGTCCCTTCTCCCATAGGTCCCAGCCGTG
GGGCATGCGTTACCTTCCAGCTCACGATGGCAGCGGTGTTCACAGTGCTG
CTCATCACTGCTGTTGCCTTTGCAGGTGAGTGCTGAGGGTTCCAAAGAGC
AGAGAAAACCCTTTGGG
```

FIGURE 10

SUITE 18

~~A52FOR~~.txt

```
TTCTCCCACAGAATCCACCAAACCCACACATTTTCAGGTCCCGTCCAGCT
CCCTGCTCTATGCTTACCTCTTCTGCCTTCTTCCGGAGCACAGCCAGCTG
AGACTGCAGATTTTCACACTTCATTTTTGCTTGTGTCCAGTTCCCCTTTT
CTGTGGAAAGCTCATAGCATCGGTCCCCTAAAAGCCTCCAGAACTGGGGA
CAGAGCAGGCAGGCAGCAGGGGCTGGAGAGAAAGAGCCGTGAGCATCTTC
AGGTGGGAGAAATCCCACCCAGGAGGATTTCCTTGGGAAGGGCATTACCT
GCAGAGCTGTTCCATGTGGATTGGCAGAAGTACTGCTCAATGGAGGTATT
CTCGCAGAGCTCTGTCCCATTCCTCCCGTTGGTCTCAGGGCAGTGCCGGG
CAGCGCTTGGAGGTGGTGTTGTTTTCTGAAAGACTTTTGGGCACAACCTG
GGGTGAGACGCGGCCCTATGGGGCCAACCCCGTGGAAACCACGCAGGGTT
GGGGTTGGATCCTCGAGCTCTTTTGCAAAGCCTTTCTGGCTATGGTTGCA
CTCAGTTAATTAAACTGTCTAAAACCATATTTTGTATATAATTAGACATG
ATGTTTACTGCTTCTGTCCCCCCCTTGGTTTAAGAGCAGAGAGGCTCTTG
CAGAAGGGAATTCCTCTCACTGAGTGCCACTTTGGAATTGTTGTGTGATC
ACCCAAACTCCAGTGCAAAGCCCCAGCCCCACTTTGGCAGAATGAATGT
GTTTTCTGCTCAGAAGAGCTTCGATTTCCTGTGCA
```

FIGURE 10

SUITE 19

H82FOR.txt

```
CTGCGCTGGGGATCTTGTTTTCCCCTGGCAATGGGAACAGCTGTTGGGTG
CCTTTTTTGGGAAAGATCTCTTTATCGGTGCATGAAGAATGAAGCGACTA
ATGGGGAATGGAAGGAGTGGTGGCTGTTTGAGTAATTGACTGATAGGTTG
ATGGAGGGATACTTGAATTAAGAGCTTTTGGCTCTTATCTCATTGCCTCT
GTGCACCAGGTTTGGAGTGGGCCAGGCCCTGGCACGGTCAACTTGCTCAC
TGTTGGCAATAGGAACATTTTTTGAGCCTCAGAGAGATTTTGTTGGAGGA
ATGGATGGATCATTCATGTCCTGGTTTGTCTGGGGGGGACCAATGTGATG
GATTAATTTTTTTCAGTATAAAAATAGTTTGTCAGGTGAACTTCTGGTGA
CTGAGTGGATGGTTGGATGGAGGGATGTGAGTTTCTGTGGAGGGATGGAT
GGTTGGAAGGTTTGTTGGATGCACTGTTGAGTGCTGGTGGGATCTACATT
TGGGGCAATGGATGGATGGACTCTGAGAATATAGACTATAGCTGAGTTGG
CAATGACCAAGAAGGACCATTGCGTTTTGTTTCTGGCTTCATGTAGGATC
ACCCAGGAATTAAACCCTATGTCATGGTTTTGTAACTTCGCTATTGGTAT
TCCACATCATAACATCATGGACAAAAGAGAAGAATAGCAAAGTTACAAAA
CCATGACACCCTACTTCTGAAAGCAGTTTTGAAATGCTTGGGGAGCTGAA
TGGTTGATGGTGTGGTGGAGTCGTGGGGGGGAGGTGTCCCTGTGGGGCAG
TCCCTGGGAAGCTATAGCTATAAGTCACCCCAATGCCCCCTCTGTGTGGG
AGTAGTGTGGGTGGGGGTCACTGGGATACCACAGTGGGGTGGAGCCCAGG
GGAGTGTCTTTGAGGTCAGTGGGGGGTGAGCAGGGCTCTCTAGAGGCCTT
TGGGGGGTCCAAAAGGAGTTGATGAGAGAGAGAGTGTGGGAGATCCATGG
GGGGGCTGCAGGCCTCAGTGCCCTCCATCTCTTGCCAGGTGCCCCAGGAA
CACTATGGGTGGGGACACTGTGGCCCCGCAGTGCTCACCTGCATTGGGCA
CCTCCCCATGTCCCCCCTGAAGGCTACAACCTCATCTATGGACCCCCCGG
TGGCCCCGTGAAGGTAATACCCCATAGCACTCCCTGAACTTCCCAGGGGA
TCTCCCTGGGTATCTCCTGGGGTACCCCAACCCTCCTTGGGGACCCTGCT
CCCACCCTGGGGAATCCAAAAGTCCTCCACCACCCAAGCACCCTAAGAAC
CCCACTGCACCCCACTATCCCTTGAGGTCCCCAATACTCCTTTTACAGCA
TTCCCATCCTCCTCCTTGGCCCCTTTATGCTCTCCAGAGACATTAAACAC
CCCTGTAATGCCCCTTAGGGACCCCTGCAGCAGCCCAATAATCCTCCCAT
GTCTACCTCCAGACACTGCAGCTGCCCCCTGAAGCAACATCCAAGGAGCT
GTGGGGCCTGGAGCCCAGTGGACGCTATAGGGTGCAGCTCTGGGGCCGGG
GGCTGGAGCCCCTTGAGACCACCTTTGACACCCGTGAGCTGGGAAAGGGG
GTCCTGTGGGGTGGGAAGGGGCACTTGGGTGGAGGACTCTGGGATACCCA
AATACCTGGATGATTTGGGGTGCTGGGGACATATGGATGCTGGGTCCTGA
AGTATGGAGGGGGGTACCAAGGAATCTGCATCCTTGGGTGGGGAGCTCTG
GGGGTTCCCAAGTACCTGAATAATGGGTACCTAGTTAGGGGAATGCCTTG
GGGTGGGGGGGGGCGGACACAGCGGGATGCCCTCGTCCCTTGGTAGGTG
AACAGGGACACCCAACTGGTTGGGGCCACCTACACTGCTCTGTCCTTCAG
CACCCCTCCCCCACCCACATCCCCGGGACTGCGCTGAGGAGCAGCTCAAT
GGACCGGGGCCTTCACGAGAGGTCCTCATCTTCCTCGGGGGCGACCGGCA
GCGGCCACTGCACGTCTTCTGCGACATGGAGAGCAATGGGGGCGGCTGGC
TGGTGGGGAAACGGGGCGGTGGGGAGGGTGTCTGGTGGGCTCTAGGGGGT
GCTATGAGGAGTCTGGTGGGCAATGGGGGTCACAGGGTGGGGTGGCTGAC
TCCATGGTTGCCATTATAAGGGTTGGATTGGCAATAAGAGACCTGTGGAG
CAACTGGGGGCATTTGGGGTATCTGGGGAGGTTCTGTGGGGGTTGAGAAG
CAATGGGGGGGGGGAGTGGGGGAGGCTGGAAGATTTAGGGGAGGTTAATG
GGAAGGTCTTGTGGGGCAATTGGGGTAATTCTGGGAACTGCAGGGGGATC
CCAGTGTTCCTGTGAGATTCACATACCCCCTATACTATCCATGGGGATCA
CAGTAACCCTCTGGAACTATAAATGGGGGAGAACCCAGGGAGCAATGGGG
GGCTGTGGTGGATCTGGGAGGGGCAATAGGGTGCCCTGGGGGGCAATATG
AGGGTCTTAGGGTGCAATGTTGGGGGTCTAGGGGGAAGTAATGGGGGGTC
TGGGGGCAGTGGTGGGGTCTAGAGGGG
```

FIGURE 10

SUITE 20

Conti224.txt

```
GGAGGGAGCACTCACCCAGGTCTGAAGCTAGTTTATCTGCAATGAAACAA
ATAAGAAATGCATGATGAGAAGGGTCAGAATATCATCCCATGGCTGATCC
CATGGGAAGACCCCGAATCTCTTTGGTTTGCGGAGGAGGACTCACCCAAC
TGTGCATTCCTTCTCTCTGCAAAGGGAAAGCAGAAACAGTGTGTGGTGAG
AGGAGCAGCTCATCCCACACATCGCACAGGAAAACCCCCTTTTTTATTTA
ATTTGGAGGGAGGACTCACCCAGTTCTGAAGCTAGTTTCTTTGCTAAAGA
AACAGATAAGAAATGCATGATGAGAAGGATCAAATTATCATCCCATAGGA
ATACCCCAGATCTCTTTGGTTAGCGGAGGAAGACTCACCGAACTCTGTGT
TTCTTCTCTCTACAAAAGAAAGGCAGAAACAATGCATGAAGACAGGAGCA
TCTCGTCCCACAGCTCCCAAAGGAAAACCCCTTTTTTGTTTAATTTTAAA
GGCAGCACTCACCCAGATTTTCAACTAGTGTCTCTGCAAAAGAATCAAAT
AAGAAATGCGTGATGAGAAGGGTCAGAATATCATCCCATGGCTGATCCCA
TGGGAAGACCTTGAATCTCTTTGGTTTGCGGAGGACTCACCCAACTTTGC
ATCCCTTCTCTCTGCAAAGGAAAAGCAGAAGCAGTGCGTGATGAACTGAA
CAGCTCATCCCACAGCTCACACAGGCATCCCTCATTTTGTATTTTGTTTG
GGAGGGAGGACTTACCCAGTTCTGCAGCTAGTGTCCCTGATAAAGAATCA
AATAAGAAACGCATGACGAGAAGGCTCAGGTTATCATCCCATGGCTGATC
CCATGGGAAGTCCCCAAATCTCTTTGGTTTGAGGAGGGAGACTCACCCAA
CTTTGCATCCATTCCCTCTGCAAAGGAAAAGCAGAAACAATGCATTATGA
GATGAATGACTAATTGCACAGCTCCCAAAACATTAAAAAAAAAAAAATAG
TGGGAAGGGAAACTCATCCACTATCGCAGGTAGTTCTGCTGGAAAAGAAA
GAGCAGAGCAGTGCATGGTCAGAGAGGACAGCTGCTCATCCCACAGCTGA
TGCCATGGGGAGACCCTGAATTCCCTCACTTTGGGGAAGGAGACTTACCC
AACTCTGCATCTTTTCCCTCTGCAAAATAGAAGCAAAGGAAATGCATGGT
CAGAGGGAACACCTTCTCATCCCATGGTTGCTCCCATGCCAATACCCCCA
AATCTTTGTTCTGGTAAG
```

FIGURE 10

SUITE 21

Conti508.txt

```
CAGTGACAGTGCAGGTGGAGGGACACGGCGAAGGGACGCTGACGGTGGGT
GGCTGCATGGACATTGGTGTCATCTCCAAGACCGATGTCCCCTCACAACC
TCCCCTCATGGTGTCCCCTCATGCTGCCACGGTGTCCCCTGCTGTCCCAT
CATGGTGTCACGCTGTCCCCAGGTGCTCCGCCAGTTCCGCCTGCTGTCAC
CTCCGAACGCCACGTGCCAGGCGCTGCACCTGGAGGTGGCCATCACCGGC
CCCATCCTGTACCATGGTGAGGCCCCACCCAAAGGCCCCGCCCCCTTTTC
CTCGCGGGGGGCGTGCCCTCAACCCTGTTTTGCATATCCCAACCCCCAGC
AGATGAGGACTACGAGGACTACGAGGACTACGAGGAGGCGGAGCCTAAGG
AGGGGGAGGAGCCTACGGAAGGGGCAGTGCCCGTGGAAGGGGCGGGGCCA
GCAGATGACCCCGCCCCCCTCAGCCCCGTGTCCTTATGGGATGCCCGTAA
GCGGCAACGCCGCAGCACACATAACCCTGCCCACGAGGTGGCCTTCCTGG
TCTGCTTCCGGTGAGGGGCGGAACTTCCTGTCCCTGGGGGCGGGTCTTCC
TGCTGATGGGCGTGGCCTGTTGTAGGCGGAGCCCAGGGGTGGCACTGACT
GGGATGGCGGTGGTGGAGATCACTCTGCTCAGTGGCTTCTCACCCCATAG
AGCTGACCTGGACAAGGTAGGGGCCCAGGGGGACTTGTGGGACATGTTGG
GGGGTTGAGGGGAGTTATGGGGTGTGGGGTTTGGGGGTGTTGGAGTTGTT
GAGGTGGCAGAATGTTTGGGTTGGAGTCATGGGATATGGGG
```

FIGURE 10

SUITE 22

CCACTCTTGGGTGAGCTGACAGCGTCCCACGTCAGCCCCGACTCCGTCCA
GCTGGAATGGAGCGTCCCCGAGGGCTCCTTTGACTCCTTCACGGTGCAGT
ACAAGGATGCACAAGGCCAGCCACAGGTGGTGCCCGTGGACGGTGGGTTG
CGCACAGTGACCGTGCCCGGGCTGTCGCCGTCCCGCCGCTACAAGTTCAA
CCTGTATGGGGTGTGGGGGCGGAAGCGTCTGGGCCCCATGTCCACTGATG
CTGTCACAGGTGAGCATGCTGTGTTCTGCCTCCATGTTCTTTTGCTTTCA
GTGTAGTTGTCATGTGGCAGGAACCTTTCAGGGCCACTTTTGGTTAATGT
TGCCTTAATAGTCAAGGAAACAATTTGTTCTTGTTGAGTGGGAATGCCTA
ACGGGATGGGAGTTTGGATGATGAGAGGACAAATCTTATAAGGGATGATT
GATAATTATTGCGGAACGGATGGAAGGAAGGTTGGATGGATGGAATGGTG
TTTGGATAAATTTGTGCTCAGAGCACAGCTGGAGTGTTGGATGAATGTTG
CTTTGCTTGTTGAATAGATGGATGTTTGGTTGTGTGGTTGCTTCCACTGA
GAATTCCTCCCTCTGTGCTGCAGCAGCAGCTCCAGCACAAGAGGAGCCAC
CTTCCCCACCACGTCTGGGTGAGCTGACAGCGTCCCATGTCGGCCCCGAC
TCCGTCCAGCTGGAATGGAGCGTCCCCGAGGGCTCCTTTGACTCCTTCAC
GGTGCAGTACAAGGATGCACAAGGCCAGCCACAGGTGGTGCCCGTGGACG
GTGGGTTGCGCACAGTGACCGTGCCCGGGCTGTCGCCGTCCCGCCGCTAC
AAGTTCAACCTGTATGGGGTGTGGGGGCGGAAGCGTCTGGGCCCCATGTC
CACTGATGCTGTCACAGGTGAGGGCAGGAATTGGCACCTGGTGGGCTCTG
GGTTTGCAGCAGGTAGAAATGTAAACGTGGCCTGCGCTGGGGATCTTGTT
TTCCCCTGGCAATGGGAACAGCTGTTGGGTGCCTTTTTTGGGAAGGATCC
CTTAATCGCAGCATGAAGTATGAATGGACCAATTGGGTGTGGGTGGAGTG
ATGGCTGTTGAGATGAGTTGGTGGCTGCTTGAGTAATTGTCTGTTGGAAT
GGATGGACAGATATGTGAAGGAGTGAAAGGATGGATAAAGTAATTTAGGA
ATCGGTGGATGAAGAATGGGTAGGTAGACCCTTGGTGAAGTGGTAGAATG
GAAGGATTTATGAACAGATATGAGTTAATTCTTGCATCGAAGTAGGTGTA
AGTGTCTATTAGCCTGTTGCACTGAACATGCAGTTGCATAGACAAATGAG
TGGGGAGAAGTACGGAGTAAATCCCTGCATGAATGGTAGGACAGAAACCT
GAATGCCTGGATGCTGGCAGTGTGAAGAATGGCACTTGGGATAGATGGTT
CGAGTATGGGGTAGATTAAAAGATGGATGGAAAAGAGGAACAGAGAGAGG
GTGATTGGATGAATGGATGGATGGTTGGATGTGACTGATTGACAGGTACC
AAGCTTTTTTCCTGCACTGTGCCTTCTGTGCTGCAGCTGCAGAAGAGACG
GAGGAGGAACCACCGTCCCAGCCACGCCTAGGAGAGCTGACGGCATCCCA
TGTCAGCCCCAACTCCGTCCAGCTGGAATGGAGCATCCCTGAGGGCTCCT
TTGACTCCTTCACGGTGCAGTACATAGACGTGCAAGGCCAGCCGCAGGAG
CTGCACTTGGATAGTGGGTCGCGCACAGTGACCGTGTCTGGTTTGCTGCC
ATCC

FIGURE 10

SUITE 23

```
GCACAGAAGGAACCGCCATCCCAACCACGCCTGGGTGAGCTGACGGCCTC
CCACGTCAGCCCCGACTCCGTCCAGCTGGAATGGAGCGTCCCCGAGGGCT
CCTTTGACTCCTTCACGGTGCAGTACAAGGATGCACAAGGCCAGCCACAG
GTGGTGCCCGTGGACGGTGGGTTGCGCACAGTGACCGTGCCCGGGCTGTC
GCCGTCCCGCCGCTACAAGTTCAACCTGTATGGGGTGTGGGGGCGGAAGC
GTCTGGGCCCCATGTCCACTGATGCTGTCACAGGTGAGCATGCTGTGTTC
TGCCTCCATGTTCTTTTGCTTTCAGTGTAGTTGTCATGTGGCAGGAACCT
TTCAGGGCCACTTTTGGTTAATGTTGCCTTAATAGTCAAGGAAACAATTT
GTTCTTGTTGAGTGGGAATGCCTAACGGGATGGGAGTTTGGATGATGAGA
GGACAAATCTTATAAGGGATGATTGATAATTATTGCGGAACGGATGGAAG
GAAGGTTGGATGGATGGAATGGTGTTTGGATAAATTTGTGCTCAGAGCAC
AGCTGGAGTGTTGGATGAATGTTGCTTTGCTTGTTGAATAGATGGATGTT
TGGTTGTATGGTTGCTTCCACTGAGAATTCCTCCCTCTGTGCTGCAGCAG
CAGCTCCAGCACAAGAGGAGCCACCTTCCCCACCACGTCTGGGTGAGCTG
ACAGCGTCCCATGTCGGCCCCGACTCCGTCCAGCTGGAATGGAGCGTCCC
CGAGGGCTCCTTTGACTCCTTCACGGTGCAGTACAAGGATGCACAAGGCC
AGCCACAGGTGGTGCCCGTGGACGGTGGGTTGCGCACAGTGACCGTGCCC
GGGCTGTCGCCGTCCCGCCGCTACAAGTTCAACCTGTATGGGGTGTGGGG
GCGGAAGCGTCTGGGCCCCATGTCCACTGATGCTGTCACAGGTGAGGGCA
GGAATTGGCACCTGTTGGGCTCTGGGTTTGCAGCAGGTAGAAATGTAAAC
GTGGCCTGCGCTGGGGATCTTGTTTTCCCCTGGCAATGGGAACAGCTGTT
GGGTGCCTTTTTTGGGAAGGATCCCTTAATCGCAGCATGAAGTATGAATG
GACCAATTGGGTGTGGGTGGAGTGATGGCTGTTGAGATGAGTTGGT
```

FIGURE 10

SUITE 24

```
CTGTGTCCCCAACCTGCTTGGTGTTCCCGCAGGACACGCTGGTGGCCCTG
GAGGCGCTGGCCCAGATGTGGCTGCACTGGGGCCGTGGGAACACAATGGG
GCTGAACCTGGGGCTCTCCTGGCCGGGGGGTGCCCGGGGGAGGGCTGGTG
GCACTCAGGTTATGCTGAAGCCGGGGCTGGAGCCGCTGGAGCAGGAGCTG
CAGGTGGGGACATGGCGGGATGTGGGGACACGAGGGATGTGAGGACACTG
GGGACATGTCTGGACTTGGTAGGATGTAACATGAAGACACTGGGGACATG
GTAGGACATGGGGGACATGAGAACACGGGATGTGGGGGACATGGTAGGAC
ATGATGGACACAGGGCTTTGGGGTCCTTGGGTCCTCGCTCTGTCCCCATG
TCCCCAGGTGCCTCTGGGCAGCCCAGTGACAGTGCAGGTGGAGGGACACG
GCGAAGGGACGCTGACGGTGGGTGGCTGCATGGACATTGGTGTCATCTCC
AAGACCGATGTCCCCTCACAACCTCCCCTCATGGTGTCCCCTCATGCTGC
CACGGTGTCCCCTGCTGTCCCATCATGGTGTCACGCTGTCCCCAGGTGCT
CCGCCAGTTCCGCCTGCTGTCACCTCCGAACGCCACGTGCCAGGCGCTGC
ACCTGGAGGTGGCCATCACCGGCCCCATCCTGTACCATGGTGAGGCCCCG
CCCCCTTTTCCTCGCGGGGGGCGTGCCCTCAACCCTGTTTTGCATATCCC
AACCCCCAGCAGATGAGGACTACGAGGACTACGAGGACTACGAGGAGGCG
GAGCCTAAGGAGGGGGAGGAGCCTACGGAAGGGGCAGTGCCCGTGGAAGG
GGCGGGGCCAGCAGATGACCCCGCCCCCCTCAGCCCCGTGTCCTTATGGG
ATGCCCGTAAGCGGCAACGCCGCAGCACACATAACCCTGCCCACGAGGTG
GCCTTCCTGGTCTGCTTCCGGTGAGGGGCGGAACTTCCTGTCCCTGGGGG
CGGGTCTTCCTGCTGATGGGCGTGGCTTATTGCTGAGGGGCG
```

FIGURE 10

SUITE 25

Conti548.txt

CCTCTGCTGCTTCCAGAGCAAAGGAAAAGGGAGAGGGGGGCTCCCACCAC
CCTATCCCAGAGCATCAGATGGGCAATGGATGCAGCAGCTCCGTGGGTCG
TGGAGGTGGCACGTGGCAGGAGCGAGGACGGCTCGGAGATACCGAGGTCA
TCAGCCACCGAAACCATCTCAGGAAAGGGAATTTCCACACAAAACTCCAT
TTGGAGCACCTGGCAGAGAAGCTGAAGCTTTTGGAGCTGGATGGAGACAG
AGGGGAGAAGGAGAAACTCTGCTCGTGGCGCAAGAGGACATTCCCCTCCA
ATGGACCACGGGATGATGGAGGTCCCACTGGAGCCCCCATAAAGGAGTCA
GTGCAGGAGGATGTGGTCAGCCCTGTGTTATTCCCTAAAGCCCTGTTTAA
TCCTTCATGTCCATGCTGAAAACTTCTTCTCTGCGAAGTCCAACACATTG
CATCTCTTCCCTTCTTTCTCCCATCACAATATCCTCCCCAAACCCCTTTT
TCTTCCTCCAGGAGCAGATTCACAGCGATCTGGAGAACCTCAAGAAACAA
AAGGAGGAGCTCTTAGAACTCAAAAGGAGTGGGGAGAGGCGATGCCAAGA
CCTTCTGGTAAGAAGCTGTTGCCTTCAAGCTGGAAAAACAGAGGTCTTTT
TGGGGTCCACGTTGTTGATTTTCCACAACCTACAGACACGGACGGAGGCT
GAGAGGCAGAAAATTGTGTCAGAATTCCGTCAGCTCCGCCGTTTTCTGAA
GGAGAAGGAGATGGTGCTCGTGGCACGGCTGGGGGAGCTGGACAGGGCTG
TGCTGAGGAGGCAGGAGGAGGAGGAG

FIGURE 10

SUITE 26

Contig51.txt

```
AGCCCAGCACTCTGCAGTCTTCTATCAGTTCCAATAGAGGAATTTTGGTG
GTAGAAGGGGCTGGAAGGACTCACTCTGCTTTGTGGTCTCAGCTGCTGGA
AAACAAAGCAGAGAAATAGCTGGTCAGCAGGGCAGCTTGGTTTCTGGGGA
CGTCTCCAGAGGGTCTGGACCTTTCCACCTGCCCCACGGTCCACCCACAT
TCCTATCTTTCCGCCCACACCCCTTTTTCCCTTTCCTTCATTCCCAATCA
AACGGCAAATGTTATTTAATGACCACTGTCAATCCCCAGAAAAATCTCCC
TTTCTCCTGCATACCTCCACGGACCTGAGCTCAGCACCACCCCGACCATC
CCTATCCCTGCTCAACACCTCCCTGTGATCCATCCCCTCCATGCTCAACT
CACCTTTCTTCCTATAGAGAAAAACAGTGATGACAAATGACCCAACCAGA
ATTGTGACGATCACAGCCAGAGCCACCTTCCAGGGATGGGTGATCTGGGA
AAAGGGGTCTGGAAAAAACATCAGGACAAGGGTTCCTTTTCCATTCCCAT
AAGTGGAAAAGCAAGACTCAGCCTTGGGACATCACAGAACCCAAAGGGGC
AGCAACCAGGGAGCAGTGATGCACAATGACGGCATCCCCATATTGGCACA
GGTGGAGGAGCTGCTCAGCATCGTGTGCCCACTGCCACTGAGCCATGGAG
AAACCCATCCCAGAAATCCAACCCAACCACCTCATCCATGCAGACTTATC
CACAAATTGCACTGTGCACCTGCTCCAACACCAGCATCTCATGGAACAAT
TTAGCTCCGACCTCTTCCAAAGGCTGCTGTCCTTCAGCTTTCCATCCATG
GATGTGAGGATGAGGATGGACAGAGGTCGGGGTGGGACACACAAACCCAG
CAACACCTGGAGGCGTCACCCCAGCCACTGACCTGACACCTCCAGGTCCA
CCACAGCGTCTGCA
```

FIGURE 10

SUITE 27

Contig99.txt

```
CCCAGCAAGGCCAAGCGCCGCCATAACGTCAGTGCCGGTGAGACTGTCTG
ATGCGGTTGCGCGAGGAGAGTCACTGAACATCGGTGATTTAGGCGCAAAG
TATTTAGCGATTGATTCGAGGTTCATTATGCGGCTTCCTTCTGTGGCTGG
TGGGTTTTGGTCTGGCTGTGCTTTACTATTGGCGGCATGCTGGCGCGCTT
AACGCTTTCGGCCTGGTATCGGGTTATCTCGTCTCTGGTCATGATGGCCT
CCGATTCCAGGCGCGAATTGCATCGCGCTTTGTTGGATAGGTGTCAGTTA
TCGGCTTAATCAAGCATTGCTTTGTTGAACAACCGGCGTAGACACCATCA
CCATCAGAAAAAAGTTCTGCGCCGCCGCCACAGAACGGACACTCAAGCAG
AAAAGCCCAATGAGGTAGCTTGAGATCGAATATCATTGGTTTCATGCTGC
CTCCCGCTGTTTCAGTGCTTTGAGCTTGTCGCGGTACTCATCCCGGATCC
GGATGAAGTCTTCACGGCGGTAGTTGGTCATTTCGTGGGGACCATTGAGC
CAGTTGACGTATCCCTGACCGTAACGAGCGACCAACCCAGCTTCGTATTG
CTGCGCCACGGTCGCCTCTTTGGCGGTGTACTTGCCAGCTCCGGCATTAC
AGGATTTGCACTGCTTATGGGCGTTGCGTTCTTCAAAGCGCAGTTCAGGG
TAAGCACCTACTGTCTTGAAATGGCCGCAATCCCACTGGCCACCATGCAG
ATCAGGCGGATTGGTCTCGCCGCAGCTGATGCATGGCAAATCGGCGTCGC
GCGCACGGATAAAGGCGTTGAAAGCTTTCTGAGCCTGAGCCTTGTAGTAT
CCGTCTGGCCTGAGCTCTGCCAGCCGCTCCTTGCGGCGTTTGCGCCCGTC
CTTTTCAGCCTCTTTTTGCTCCTTGATGCGCTTAGCCGCGGCTTTCACCT
TCTCCTTCTTGCGTTCTTCCATTGCGAGGATTGCGCCATGCTCCGGGG
```

FIGURE 10

SUITE 28

ContigB5.txt

```
CCCTATGGGGCCAACCCCGTGGAAACCACGCAGGGTTGGGGTTGGATCCT
CGAGCTCTTTTGCAAAGCCTTTCTGGCTATGGTTGCACTCAGTTAATTAA
ACTGTCTAAAACCATATTTTGTATATAATTAGACATGATGTTTACTGCTT
CTGTCCCCCCCTTGGTTTAAGAGCAGAGAGGCTCTTGCAGAAGGGAATTC
CTCTCACTGAGTGCCACTTTGGAATTGTTGTGATCACCCAAACTCCAG
TGCAAAGCCCCAGCCCCACTTTGGGCAGAATGAATGTGTTTTCTGCTCAG
AAGAGCTTCGATTTCCTGTGCAGCAATGTGGTTGGGATCTGATCACTCAC
CGCACACGCTGAGCCCTGTCACCAGCAGCAGCAGCAGCAGCAGCAGCACC
CCCAGCATGCAGGCTTTCTGGAAGTCCCACGGAACTGGAAGAGCCCACAC
TTATATAAAACAGACATTTTGAAAAAACTTTTCCTTTTACAGAAATGATC
TCCCTGTGAAAGAGCCCCTCCACCAACCTGCTACGTTAGAGCAGAAGTTG
ATGGCTGCTTTGGTTCCTTGAGAATTTGGGGTCCCCGGACCCTTCCCATT
GGTTCCCATGCTGTGTATGAGCAGAAGTTGATGCCTGTTTGTTTTCCTCC
AGTTCCGGGGTCCCCTGGACCCTTCCCAGTGGCTCCCAGTGGTTCCCAGC
TGGGAAGGAGGTGGCACAGAGGGGTGACAGCAGCAGGGAGCATGGGATGG
GCTCCCGCTGGAGGTCAGATGGACACAGGGACATCACCTCCACGCGTGGT
TCTGGAGGTGGTGGAGGCCCTGCAGGCTCCATAGAGCATGGGGTGGAAGC
TGAGCAGCCCCCAGGCTTTGTGAGCCGAGCCCAGTGTGGGGCAGCCGGTG
GCTGGGAGGGCGGGGATGTCTGCAGCCCTCATGCCACGTGGATGCAGGGT
GCGTTTGCCACCATTTCATTCCATTCTCTCACATTGGGCTTCCCGATCTG
GGCTGATTTTTGCTCAAAACCACCACACCTCTGGCCATTCCCAGGCTTCC
TTCTCCCCCACCCCTTCCTTTACTCCCCCATACAAGCCAGGGTGGACCCA
GAACCCAACCAGCATTGCTGGTGTTTCTCA
```

FIGURE 10

SUITE 29

```
CCGGCATCACCGGCGCCACAGGTGCGGTTGCTGGCGCCTATATCGCCGAC
ATCACCGATGGGGAAGATCGGGCTCGCCACTTCGGGCTCATGAGCGCTTG
TTTCGGCGTGGGTATGGTGGCAGGCCCCGTGGCCGGGGGACTGTTGGGCG
CCATCTCCTTGCATGCACCATTCCTTGCGGCGGCGGTGCTCAACGGCCTC
AACCTACTACTGGGCTGCTTCCTAATGCAGGAGTCGCATAAGGGCATCGG
TCGACGGGATCACGTTGTGTCCCTGAAGCTCTCCTGTACCCAAACACAAA
GGTGATGTCCCCAGCATCCCTATCCCAGCACTCTGGGGGACTCCTATTGA
ATTCCTCCTTGGGCTTGCTGCCTTCTCTTCCCGTTCCCAGAGATCCCAAA
AGGTTAAGCACCTTTGGGTCAGTGTTCAGAATTGTCACTGCCAGTTTTGG
GGTATCAGTGGCAAATTGAGACCCTTTTACCCAATCTTGCACCACTCTGG
TTCCCCAGTCTTATGGTTTTAGATGGAGTAAAAAGGTTTATATGTCATAA
AGTTCTTCTGTGTCTGGTTATTCGCTGCTTCTGGATGCCAGGATCATGGG
GATAAGGGGAAAACAATGGGTTCTCTTATGCGTAGAGATGCAATCAGATG
GGGAGAAAAAGAAATCTTAATCTTTCTGATCCATCTGACAGATATTCAGT
ACAGCCCTGAGGATGTGGGAAATAAATCTGAAGAGTTTGTTGGCAGTTCC
AAGGATTTGGAATGACTAAATCCCATTCCTGGTGTCTGCACAAAGTTGGC
TGTGTTGGAACCCAGAAAGATCCATGCAAGTGGGTCATCCCTGAAAGCAT
TGTGTTCTGCTGTCTGCTAGCGGAGAGAAAGACACAGAGGGGAAAATTAA
GTGTTTTATTGTTAATTATTGTACACTCTGAGGTTTCAAATACCAAATCT
TTAACGAGAGCGGACCACTTGATTTGAGGGTGACCATCTCAGATGGGGAC
AACTGTACCTGATCAGGCAAACCTGGGGGAAATTTGCCTTTCTGCCACTC
TTTTGGGTGGGATTTTCCCTTTTGACCACCATTTTCTACATTCTAATCAC
CCATTGCAGCACTTCTCCCCCTTTTTTTGCCCCATTTTTCTCCTGCTCA
GCACTTCTTAACAATATAATATAAATCAATATCATATCAATATGATTCTA
TGCCAATAGATTAATGGGGATGAAAGACACATAAAAACCCAAGTCCTCAT
TTCATCTGCTTCCCATGGATGGGTGGGGAGGTGGCTGTCCCCTGAGGCT
GTAGGATGTGGGGTCACCCTTGTCTGTGTCTCAGGGACACAGCCTCAGCT
TGGACCTGACCCCTACCACCCACAGCCACGGACGGACCCTCTCCCCAGAG
AAGGATGCATGGGAAAAAACAAAGATGAGCCCCCCTTCATCAGCATCAAA
AAATGCCACCGTCCCTCCAGCGTAGTCCAAGTGGACGCTGACCCTCCTGG
GCACCCAGCGCAGAGCTAACAGGGTCACCTTGTGGGTGGTGAGTGCCCGG
ACCTGTCCCCCCCATTTCTCCACCCCCCAAATCCCCCCTTTGGGACAGAG
GCTGAGTTGACCCTTCCGAGGGATGGATTCTCGGGCCACACCGATGGCCC
AGTCCCCTTCATCCCCCACTTCCACCTCCCAGCAGTGCCGGCCGGCAGAG
AAGCTTTGGTGGCCCAAAACAAAGGGCCAGTAGGCGAATCTTTCGGGGTT
ATCAGGAAGGTCCTGTTGTCCTTCCCCACGTTTCACACTCTTTCGGTCTT
CGGAGAGGATGAGGTCAGGGTGAGCGGTGTCGGGGTCCAGGGTGATGCTG
GCTGTGGGGTGGAGAGGATGAGGAGTGTAAGGTTTGGGTCCTCGGTGCTG
AGGCCATGAGGATGCGGAGAGCTTGGATCTCCAGCACTAAAGGAGTTGGA
TGTGCTCTAGATGGCCCCACCTGAGTAGGGTTGTAGGGTGGGACCGTCCC
TTCCAACCTCAGCCATTCTGTGGGGCCATGGGTTGGCATCGGAAGGGTAA
AAAGTACCAAAGAAGAAAGTAAAAAGGTGAGAGGTGGAAACCCCTCTCAT
GTGCCCGTGCTATATGACAATAAAAGTGTTTTGAGCCCCCAGAATGCCCA
GAAATAAAGGCGTTTCTGCAGACCTTCTGTTCCATTGGTCAAAAGAAATG
GTGAGGGGAATAAAAATGGAAGGAAGGAGATCTATGGGATATTACCTGCA
AAGTCTGCAGTGCTTCATCTCCTAGACCAACCCGGACCAGTTCAGCCAAC
CCCATGGTTTAAAAAACAGAGCTGAAATCTGAAGGCAGGGATAATGAATG
AGTTCAACCCGCTCACCATATTTGTTTATGGGAAATGGATATTTATCAAG
GCGAGGGATCTGCCCTGGGGCCATCATCCCAAATTACAGCCAGACTCGGC
CTGCAGGGTGAAGAAAACTTGTTTGGCTGCCCTGATTTTTGTGTATTCCT
CCCTCGGCATCTATTTTTGTCCATTTGGGTACAGCCTATGGGTCCAGGCG
CGCCTCCATCTAACAGGTAATGCGGCTTTAGGTTCTCATGCTCAGCAAAA
GGCACTTTTAGGAAAGGTGAAGCTGGAGGGGTGCAGAGCCGGAGAGCAGC
CCGTCCTTCACCCCTGAGCACTTCTCAGGAATTACAGCAAAACGTGTAAT
TAAGAGTGGCAAACGGGGTATCGAGTCCTTCGGGTCTCAATTATTTTCCT
```

FIGURE 10

SUITE 30

GAGTGGGAATAACCCGTTGCTCTTCCATCTCTCTGCATTATTCTGCTGCA
GAACGAGTGATGGGCTGCTGGTTTTCACCAAAATACCACCATTTCCCACC
CGAAACCCTTCTGAGTACCTTGAAGCCTCTTCAGGGTTTCCTTCAGAGCA
CCGTTCCTCCATGAGGAATGGCACAGCCTCTCCTCCGGCCCTGGAGAAGC
GCCCGCTGGCAGCTGGAAGGTCACTTTTCCACACCTGGAGGGGAAATAAA
TGCATTTTCAGGTGGTTGTATCACAGAGCATGCCATCACTTCAGGACAGC
AGAGGCCAGCACACGGCGGCCATCCCCAAAATACCCTTCAGGGCTCGCAG
TTCCCCTGGAGCAGAAGAGCATTCATTGATGAGCTTTCTCCTCCATGGTC
ACTGCCTGATGCAAAGCTCACAGAACAGCTTTTCAGAGAGGCCACATACC
TGGTGATGGGGCTTTTCACATCCTGGGGACAGAAGAGAGGAGGGGGAGAG
GAAACTCAGGTCAGTGCATGACCCATTTTGTCTTTAAAGTATGGAAAATT
GAGCTGTTTGAGTGGGGGTGGACCTCTTGGGTCTTCCAACATGTGCCCAA
TTTTGACTTTAAGTCATAGAAAAAGTGAATTGTTTGACTGGGGATGGATC
TGTTGGGTCTTTCAACACATGGTCCATTTTGTCTTTAAATCATAGAAATA
AAGAATTGTTTGACCAGAGATGGACCTCTGGGGTCTTCCTCCACGAGGAA
GGTGAACCAACTGAGGAGCATCCATGCACGGCAATGAATCCTGCAGATCC
ACCCCACTGCTGCTCTCCCAACCCAGCCGTGGATTTCCCCTCTTAAAACA
GACCCCATGAGGACCTTCTGCAGTAAGGTGAAAATACTGGGAATACTGAG
ATGAGGATAAAACGGTGGGGGGAAAGAGGAGGCTGCAAACCTCCATCTCC
TCATTGTGGTGGGGGTTTCAGGCTGATGGAACGGCATAAAATGGGAGGAA
AACACCCAATTAAGGCACCATGCAATTGGTCGGGGTGGGGAGGACATCCC
TAAAGGACTTTTCCCCTTGAAAAAGCTTCCCTGGAGGAATTCACTCACCG
ACTGCTGGCTCTTCTCTCCCTGTGCTTTCGTATCCAGCGGGGAAATCTCC
TCCGAGTGCTTGGCGGTGCTTTTCTGCCTCTTCTCAATCTCATTTTTCAG
GTCTTCCAGCTGCCAGAGCAAGAAGGGCTCTGTGTTTTCCTGCCTGGAAT
CTGAGCCCTCCCTACTGGGGCTCAGCTTTCCTTCTGATGCAGAAAGTGGA
AAATAAAGAGCAGTGGGACTGGAAATACCAGGGGGGACTCATGAGTGGCA
TCCCCCACTGGAGGAGCTCAATGGTGAGCTGGAATCCTTGCTAAGTTTTA
TCGAATGTGGGGGACAGGAGGAAGAAATCAAACTCAAAAAGTCATGAACA
GGTGGCTGTGAATTCGGGGCAGAAAGCTGAGGGCCCTAAAAGCACAGGAG
GCAAAAAGGATGGAGAGAAACGACCCTACTGATGACACATCGCTGCCCAG
CAGCTGACACCTACCAGATCCTCCAGGTTTGGGCACTCCAGGGCGCTCTT
CTTCCTCGGAGACTTTCTCTCTCCTCCTTTGGAAACCCCTGATATCCCTC
TGAGTTTCTTCCCCAGTGAACCCACAGAACCTGTTGTTTTCAGCCCTTTG
ATGGGGTTGGGGTTTTCCCTTCCTGTTCCTTCCCAGTCTGGGGTAGAGCT
ATGGGATGGCTGCGTTGAGCCTGCAGGTCTGCTCCTGGTGGCACCCTTGG
CAGGGCGTGCTGGGAGCTCTGGGTTTGTCCTTTGTCTTTCTCCCAGTTCC
TTGTCCCGGGGAGATGCTGAACAATGTCACTTTGCAGATTTTGTCAGCTT
CCTTTTAGGATCGAGCCATCGGGAGTGGGGTTAGGGGGTGTATATGGGGA
AACCATAAGGAAATAGGGAAGGAGATGCACAGCCGGATCCTTGTGGGGAT
GTGGAGGAGCACAAGTGAGGATCTTTGGGATTTGAGTGCTCTCTCAGCCC
AGCACTAACACAGAGCACTCACAGCCCTGGCTCTGAGCTCTCGAGGAAAC
ATTTCCAACCATTTCTGCCCCACTGTCCTTGTGTTGAGCCCCATGGCCAA
ATACACATGCCTAGAAAATAAAGCCATGCATTACATATGTATTTAATTTT
TGCGTGGCAACCACTGAGACCCAACTGGAGGAGATAACTGCCATTCACTT
GGGCAGGTTTGCAGGGGTGAACTGCACTTCCAGCAAACCCTCCCTGTTGG
GAAGAGCCACAGGGATGGATGGCACTCTGGGAGCTGAAGAACTGGAAGCA
AACTCCCTGCAACCGCTCCCCTGGGGCACAGAGCCTTTCATCCCAAAATA
AGGCGTCCATCATTGAGCAAATGAGTCACACCGTTGGGCAAACGACTTGC
ATTGCATCCCGAAAAGCATTAATTGCAGAGCCTGGAAAACTAGCTGGGCT
GGAAACATCTGCATTGCAGATCTATGGAGCAGAATAGACCCTGAACAGAT
CCTTCACCCAAATTCCCCAGCAGGTGGGACCAAATGGCAGCGATGCGTGG
GGCTGAGGAAAGATACCAACACATCAAAGAGCAATATTGAAATTTCAGCT
GTAGGTTTGACCTTTGGAGGTGGTGAGGTGGGGCTTTGTCATGGGATACC
CACTCATATC[illegible]CCTCCC

FIGURE 10

SUITE 31

```
ACCCTCTTTTAGTTCCTCTTCTTGGTTCTACAATCACCAACCTGTGTGTA
TTTTGGTGCTGCCTGTTCCTCTTTTGGGCTTTCTCAGAAGAAAATGGGTT
TTTGAGGGAATCCATTCAGGTGAGTCCTCACCCCAAGCAGCTCTTCTTCA
CTTTGTTGGCCCAAAGCTGACCCAGAGCCATACACCCAAAGCAAACCCAG
AGCCGTACACCCATAATGAGGCAGGAAGTGGAGTGTGCAGAGCACATCTT
TTAATTAAAATTAACTATCAGAAACGTAGGCAGAGACCAGCTCCCCACAC
CAGGCGTTGCTATTTGCAGTGAAAGGCCGCATACCTTTGCAGGACACCCC
AGATCTGCCCCACGATTGATGTCAAATAGATGCATAAATTTCCTTCCAAG
TCTTCAGTGCTCTCTGGTGGTTTCCCCACCCTGCAGAGGGACCGCCCCGG
GGCTCCCAATGGGGACAGACACAGGGCAGAGCAGCGGGTCCCCTTGGCAC
ATTGCTCCAAGCAACCACAGCACACATCCCATCAGATGCCCCTTTCATAA
AGGACATCTCAAGGACAGATCTTTAGGGGAGATCTAAACCCAACCCAATC
CAAATGGGACATCAGCTGCCCACTCGTGGACTGCTCCTCTGAGGGGGGAT
TTTGGGTGATCTCTTGCAAGCGAGCCCCCAGCCCTATCTTGAACAAGGGG
AGGACCTTCTCCCCATTGAACAAAGCCCTGGTGTACACCAAGATGGGGGT
GTCATCATCCGAGCTGAAGAATGCCACCCGACCCCCTTCGTAGTCCAGGG
AGACCCGAATCCTCCTGGGAAGTGCATTCAGACGTAGGTTGGCACGGGGA
GACGTGAGGGAGTGGTAGGCCTCCAGCGCCCAGACACCCTCTTTGGGGCT
GAAGCTCATGGGTCCCTTCCTCTTCATCGAAGCCCGGGCCACCCCCAGGG
CCCACACCCCCCCCTGTCCCACCTCCACCTCCCAGAAATGCCTCCCCGAG
GTGAAGCCCTGGCAGCCCAACACGCAGGGCTCGAAGCTGAACCTCTCGGG
GTTCTCGGGGAGGTCCTGTGGCACCAGTTGGCCCCGGGCTTGTTTTCGGT
CTTCAGAGAGATGGAGGTTGGGGTGAGCGGTGGTGGGGTCCATGGTGACG
TTGGCTGTGGGACATGAGGGGGAATGGAGGTAGGATTTAGGCTTGGGGGG
AGCTGGAGAGGTTCCTCTTCCTTCTGTCCTTTTCTCTGGGTGCTTTTGGA
CATGGGCTGGTGGTGGTGGTGGGTTGATGGTTGGGCTGGGTGATCTTTGG
GGTCTTTTCCAACCTTTGTGATTCTATGGGGTGTGTGGGGCTCCACCAGC
CTCAGTGTCCCCCAGTAGAGATGTAGGAGAATGGGGAGAGGACAAATTTT
AGGGCAGCATAATGCGGGAGGGACAAAGACATGGGAAGGGGACAGCTTGA
CATTCACGGAGGGGAAGGGGAAGCACAAACACTGTTAGGTTTTGCCTTGA
ATCTGTTACTGGCTTTGTAGGACCACCAGCATCAGGATGCTGTCCCCATT
CCCTCCCTTCCCTGTGGGACTGCGTTGTTTTTTCCCAAGAAAACCACTCC
CCACCCCACATCCACCACTGCTGACATACCTGGCTCTTGCAATTGAAACA
TCAGGCTGTCTGAAAAGGAGAACAAATTCACTGCATTGGGTTTATGCTTC
AGGAAAAGGGGCTGGGAGATGGGGAAGGGAAACCATGGGGGTCTGGGGGC
TTCGCAGTGCAAAAGCTCTGGGTTTACTGCAAGAGCCCCACGACCCTCCC
AGACCTGGAGGAGACCCCGACCCCATTCAGTACCTTGGCACTTCTGCAGC
GTCAGTCTCACCAGGACGTTCTTCTGAAGGAAGTCCTCCAACCTTCTTTC
CAGAGTGGGGGAAATCTCTGCTGGAGGGCTGAACTTCATCATCTCACAGC
TGCAAAGAGAGGAGAAGGGTGGGGATGGGGGGACTGTTGCGTTGGTTGGT
TGGCTGTTCATTTTATTCTCAATAGGAGAAGCTATGGGGTGAGGATATTT
GCACAGGGACGAAATCCCTTTCCCCCCTGGGATCCCTCTGCCTTGCAGCC
CTCCCCCAGGGTGCCATCCAAAAATCAGGGTGACAATAGGAAGGAGCCAT
GTTACCTATTCAAGAGCCTCCTGATGTCCTAAAGGTGGGAGGAGAGAGGA
GAGATGGATCAGAAGAGGAGCACCAAGGGCTGCCCCTTCGTATGGCAATG
CACAGCAAAGACCACCCTGCCCACGGTGTGATCCCCCCCAGCAGCAACAC
AGGGAGCTCCCATGGGGTTGAGTTTGGGTTCTCAGGGTTTGCTCTGTCCC
CCCATTTCCCACCACCCCTTTGGGTTCTCACCAGCAGGAATTTGCTGTCG
GGCTGCTGGAATTTGCCCTCCATCTCCCAGATCAGGGTGTCAAGGTGGGA
CATCTCCTCCATCACCTTCGTCACCGCATCCTCCTGTACTTTGGTGACGG
CTCTGTCCAGGTCTGCCAGCTGGACCAGCAGGAAGCGCTCCTTCTCCTTC
AGAAATCGCTGCAACTGCTCGAATTCACACACTATCCTCTTCCCTTCCTT
CTTGGTTTTCTCCTGTTGGGATGAGGGAGAAAGCCAATGGGGTGGAATAG
AGGCAGGAAGACCCCCCCTGGGGTCTCAGGATGCCGTGTTCTGGGGGATA
TCCAACCAAAACCAATGGGGATGTAACACCAATGCCAATGGAGCACAAC
```

FIGURE 10

SUITE 32

```
ACTAATGCCAATGGGAATTTATCACCAGTGCCAATGGGAACGTAACAACA
GCGCCAATGGGAACGTAACACCAGTGCCAGTGGGAATTTATCACCAGTGC
CAATGGGAACTTAACATCAAAAAGCCAAAGATCATCTTGCTGGGCATTTG
GGAGCAGCAGGAATTTTTCAGGAGTTTTATCCCAAAAGCAAAACCAAAGG
AGGGGGTAGGAGATGAGCTCTGTATGAGGGATATTTACAGAGTTTAGGAG
GATCTGCTACGTTATCTCTTTAACACAGGGGTTCCTGCGTAACCCCAGCT
GATAAACACAGCCTTAGCGCTTTCCCAGCCCAGCTGCGAGCCAAAAATGC
ATGATCTGCCCCCAAAATACACCAAAACAAACAGGACAGGGCGGAGGGGA
AGGCAGACACCTCCCCTGCTGCACCCACCAAATACAAGCCCGTCCTTCCA
CCAGTCCTTCTGCTTTCCAGGTACTTTTCCCTCTCCTCCTTTGAAGCCTG
GAGGCGAGCCTGAATTTCTTCCTGTGCCAAAAGAAGAAAGGCGGAAAGCC
TGTTTTCCCACTTAAACTGCTTCTGTCAGATGGGAGAGGCTTTGCTAAAG
CCTGGAATCCTCTGCAAGGTGCAGAGCTGGGCAGAGGGAAGCTCTGTGAG
CACGGTGTGCTGCTCTGGAGCTCTGTGCAAGCTGGGAGTATTTTGCAGAG
AGAAAAGAGGGGAGAAGGGAAGGAAAAACACGAACTTGCTGCAAACGTAG
AGAAAAACGCTGCAAAAGAGCAACAAAAAAATCAGCACTGACAGCTGCGC
AAGGAGGTGTGGAAGGGCAAGATAAGCACTTGGTGAGATTTCCCTCATAA
ACACCCCAAAACGGCGGCCCTGGGGTGTGTTTCTGTATTTAAGAGCCCTC
AGTGGAATGGTTTTTGCAGGGCTGTGGTCGAAGAGCAAAGCATCAAAGGA
AGGAGAGGGCAGTAATGTTGCAAAGGGCTGACGGCGGTGGTTGCAAAGAG
GGAGGATGGGGGGGATGCGCCAAGCAAAGGGTTGCGTGGGTTCACCCGC
AGGGATGCACTGCGCCCTTGGCTCCGGGTTTTGGGACCGTACCTTGTACT
CCTGGGCCGCCTGGTGGGCAGGGAGCACAGCGTGGGAGCGGTGCGCCTGG
GACGCGTCGCACTGCGCGCAGATAGGCTCTTGGTCCTCTGTGCAGAAGAG
CTTCAGAGCCTCGCGGTGCTGCTTGCACCAACCCGAGGAATGCAAACTCA
GCTGCCGGGCGATGCTGGCGATATTTGCCAGCTCTCTGCTGGGGCGGAAA
TTTTTGTGCAACGCCGTTTTCCTGCACTGCGGACAGGGGAAATTTCCCTC
CAGCCCTTCCCAGCAGCGGGCGATGCACTCCCGGCAGAAGTTGTGGCCGC
AGGGGATGGAGACGGGATCCTGGAAGTAACCCAGGCAGATGGAGCAGGAG
GCTTCGCTCTGCAGGCTGTCCAAGGGGCTCTGCGTGGCCATGGGCTTCCT
GCTGGGCTCCGATCCGCAGAGGGAATAGGGGACCTTTCCTCCTTATCTCC
TCGCTGATAGGAGAAATCCGGCCCCGGAGGCTGAGCCTGAGCCAAACAGG
GCTGGGAGAGCTCAGCCCATAGGGGATGCTGGTGGGAATGGGGGCAGCTC
GCGGCTCCCCAGCACGGAGTCACCAAACTGGGGGGATCTGGGGGAAATTC
GGAGGAAAAGTCAGATTTTGTCCTCTCCTCGAGCAGCAAAGAGGGCAGGG
GAGGCGATTTTTCCCTTCTGTGCGATCACTGTAAGGAATTTCCAAAGAAA
ACGCATGGAGGTCTGCTTGTTGGGATGGAATATAGACGTATATTGGAATA
AATACAGGAAGACGTTGGAACATGGGAAGGCACTGAGATATAAGCGTGCT
GTGTTGGATATGACTCTGCTCGACTAAAGTGAAGGTGGTTTTAATAGCAC
TGCTCAGAGCCAGGCGGGTTTTGGTGTTGTTTGGGGGGAATTACGTGGGT
TTGGAATTGGGAAATATGAGACGGAAAAATAAGAATAATGGAAGCGCCCA
ACGTGGGGCTCGAACCCACGACCCTGAGATTAAGAGTCTCATGCTCTACC
GACTGAGCTAGCCGGGCTGATGGGCACGCACCCTTCTAAGCAATACTTCA
TGGTGATCCTGCGGAGGGGTGCTAATAATTCTACCTAATTATTTTGTTAA
TTATCCCGGTAATTATGGGTTCTGAGCAATCGCGAATCCACGGGGAAGAG
CTGCATGGGGAAAAAGCACCTATCCCTACGGGAATAGCCGGGAACTGCCC
GGCAGTGCTGCAGGGCGGGGGAAAGAGGGGAAAAGCAGGAAAAAAATGGG
CAAAATGGAACGTTTAAAAGTGGAGAAATTAACAGTGAAAAAAATGCAGG
AAGCGTAAAAGTAAAGGCTGTGTTTCTGCCCGGTTTCGAACCGGGGACCT
TTCGCGTGTGAGGCGAACGTGATAACCACTACACTACAGAAACGCGCTGA
AGGCCGCTTCGCCGCACGGAGATGTGAAGGGGCGAATGCCGGGGCTCGGT
GCGGAGTTTGCAGATAGGGGCCGCTCCGGGCCGCTCCCGCGCCGGTTCCG
GTGAGCACAGAGTGCAGCGGGTGACAAAATGAAGGGAAAAATGTAAAACT
GATGCTCCCGAATCGAGGCTCGAACCGCCATTGTCCGACTGACAGCCGCG
CGCTCTACCGAC[illegible]CGCCC
```

FIGURE 10

SUITE 33

```
CCGTAGAGCGCCCACCCCGTTGCCTAGTGACAGGAGCGCCGCTTCCGGTC
AAGTGATGAGCGGAGGGGGCGTGGCTTGTGTCAGATAGGACGGAAGTTCC
GGTCAGGTGGTACTGGAAAGGGGGCGTGGCTTGCGGCAAAGGGGACGGAA
AGCGGAAGTGCTGCCGTTGGTTGGCGGAGTTCGCACCATAGAAGAACGAC
GGCGGCGGTGGGAGGGCGGGAGGTAGAGCGGTCCCCGGGGAGAGTGCTGA
GGGGAGCGGCGAGGCCCGAGGAGGGAGCGGAGCTTACGGGGAGTGCGGAG
CCTCGAGGCGGGTCCCAGCGCTTCGCTGTGGGGCAGGAGAAAGGCTTCGG
GGCAGGAGGAAGAGGGCCTCGGGGCCTCCCCATGGAGGCGGTGGGCGACG
ATGGGGCGTCGTCGGGGCGGCTGAACCCGGTGGAGACGCTGCAGGAGGAG
GCGATCTGCGCCATCTGCCTGGACTACTTCGTGGAGCCGGTGTCGATCGG
CTGCGGGCACAACTTCTGCCGGGTGTGCATCGCGCAGCTGTGGGGTGGAG
GAGAGGCTGAGGTGGAGGAGAGCGGCGGGGCCGCGGCGTTGGAGGAGGAA
GAGGAAGAGCTGGAGGAAGAGGAGGAAGATGAGCTGGGGGAGGAAGAGCT
GGACGTGGAGCAGGAGGAGGAGGAGGAGGATGGAGGCGGGGAGGAGGAGG
AGGAGGACGACATGTGGAGCGAGGAGGAAGAGGATGGAGAGCTGTGGGAA
GGTACTGGGGGTCGGTTTGGGCCTGCCCTGTTGAGTGTCTTTATGGATGA
GTGAGGGAATTGGGTGCACCCTCAGTCAGTTTGCAGATGATGCTAAGCTG
GGGGGGTGTACTGATCTGCCTGAGGGTAGGACGGCCCTACGGTGGGGTCT
GGACTGGGCCCGATGGGCTGAGGGCAATGGGGTGGAGTTCAGAAGGACCG
AGTGCCTGGTTCTGCACTGAGGTCACAACAACCCCATGCAGCTCTACCTG
GGGTAGAGCGGCTGAAAGCTGTGTGAGGGAAAAGGATTTGGGGGTGAATA
TGAGCCAGCAAGAGGCCAAGAAGGCCCATGGCATCCTGGCTTGTATCAGA
AATAGAGCAGCTAGTGGGAGCAGGAAGTGACTGTCACTCTGTACTGGCAC
ACCTCAATGCTGCACCCAGTTCTGGGTCCCCTCTCACTACAAGAAAGACA
TTGAGGCCCAGTGAGGATGGTGGGGGTTGGACTCAATGATCCCTGAGGTT
TTTTCCAACCTTGATGATTCTGTGATTCTCAGACCCCGTGGAAGAGGAGC
TGTGGGATGGAGTGGTGCAGGGAGAACTCTACTTTGGGGACGATGATTAT
GATGAGGATGTGATGGAGGAGGATGTGGAGGAAGAGGAGGAGGAGGAGGA
TGAAGCGCAGAGCCCTCCGCCCCCTGTCCTGCCTGCCCGCCCTCGCCGCC
TGCAGACCTTCACCTGCCCCCAGTGCCGCAAAACCTTTTTCCAGAGGAAT
TTCAGACCCAACCTCCAGTTGGCAAACATGGTGCAGATCATCCGGCAGCT
CCACCCGCACCCGCAGCGCCTCGCGCCGCCCGCCGGCCCCTCAGCCTCAG
GGGGTCCTGGGGGGAACCCAGGGATCCTGGTGGCAACAGGAGGTCGGGGG
TGTCCGAATCTGTGCGAGAAGCACCAGGAACCCCTGAAGCTGTTCTGTGA
GGTGGATGAGCAGGCGATCTGCGTGGTGTGCAGGGAGTCACGGAGCCACA
AGCATCACAGTGTTGTGCCCCTGGAGGAAGTCGTGCAGGATTATAAGGTG
GAGTTTGGGGAAGGGTCACGGTGGGATAGTGGGTGAGGTGGGGTTTGGGG
AAGGGCTGTGGTGGAGAAGGCGGGGTTTGAGGGAAGAGTTATGGGAGAGT
GGAGGCTTGAAGGGAAAGTGAGGTTGGGATCAAGCTAGGTTCGTCTTGCT
GAGCTGGTTGGGTTGGAGGCGTGGGAGGCTGGGAAACCACACACTGCAAT
GAGGAGGTGGAAGGGTCTGGGTACCCATTTTCTGCTTAAAAACACCTTCC
CAGCACAGTTCCTCAGAGAAAGCAAAAGGGAAGTGGCGTGAAAGTTGGCT
CTGAGGTTCCGTTTTCAGCTCTGCCACCAAATTAGGGACAAAAAGAGGCG
ATGACAGAGGGGATTGCCCCAGGCAGGGTTTGCTGAGTTGTGTTTCCTTC
CCTCAGTACAAACTCCAGAGCCATTTGGAGCCACTGAAGAAGAAGCTGGA
CGCGGTGCTGAAGCAGAAGTCGAATGAGCAGGAGAAGATCACAGAGCTGA
GGGTAAGAGCTGAAGGTTTCTGTGCTTCATAGAATCATACAGGAGAACCA
TCAGGGTTGGAAGAGACCACAAAGATCATCAGTTCCAACCATCACCGCTG
CTGGGAGTGTGCCTTGGTGGCTGAGCAAGGAGAGAGAAGCTTTGCTGCTG
CTCTGAGCTCTCACGGAGGCATCATATTCCCTTTCCTGCAATTATTGGGC
TGTGAGGGCTTGGAAACGGTTTCCCAGTTGAATTAGAGCTTAATGAGAGC
TTTGTGTGCCTCAGTGTTGAGTGGGAATTGGTGGTTTGGGAGCTGGTATT
CCTCATTTGAGTTGAGGATGCTCTACATCTCTAAACCTGTGCAGACTTTG
CTCAGTTCTGTCTGTGGTGCATTCAGGAGATGCGTAAGCTTATGGTGTGT
GGTGAAACTGAGAGAAGCATAGCACAGCAGCCCAAAAATGAGCTGATCTC
```

FIGURE 10

SUITE 34

```
TCACCTCCCCCTTCTGCAGCAATTCCCCTAATGCTTTTCCTCCCTCTGCA
GGAAAAGATGAAGCTGGAAATCAAGGAATTTGAGTCTGATTTTGAGCTGC
TCCACCAGTTCCTCATTGGGGAGCACGTGCTGCTGCTGCACCAGCTGGAG
GAGCGCTACGAGAGCCTGCTGGCCCGGCAGAGCAGCAACATCAGCCAGCT
GGAGGAGCAGAGTGCAGCCCTTAGCCGCCTTATCACGGAGGCAGAAGATA
AGAGCAAGCAGGACGGGCTACAGCTGCTCAAGGTCTTCTTCCATCCCTTT
CCTTGTCTTTATGGCAAAGCGATAGCACGATGGTGGGAATAATGCTCCAG
AAAGCTTCTGTGTCATGAGAGAGTGCCTTTAGTTGGTGGGCTGGGTGCTT
CTCCACCCCTCCTTGTGGTGGTTTTTGAGGGAAAATGCCGGGGGGGGGGG
GGGGGGGGGATATGCCCTGAGAGATTTAGGGTCTGTTTTGGTAAGGAAAG
CCTCCAGCAATGTGTGGGCTGTGTCTTTGTTCTCTGTGGGGAAGGGAATC
ATCCAGGCTCAGTGCTGAGTTGTGGCTGATAAGAGGATTTATTGGGAGCA
ACGGTGGGATTGGTATCAGTCATCCCTAATCCTTTCCTTCTCTTTCCCAC
CTTGCTGCCTCCTTCCCACAGGACATCAAGGGCACTTTTATCAGGTCAGT
GACTTTGTTTGCATCTTTTCACTTTGAATAACTTTTCTTTTTTTTAATGT
CAAAAAAGCATTTGAGCTTTTGTTTTAAATCCTGTGTGATGGGTACAGTT
GGGGCCTGGTAATGCAGGGGAAAGCTGTGTCCTAACTTTTGGGTGATGGA
AACTTCTGGCTGATGGGGTGCAAATGGGATCTGGGGAACAACTTGGGAAA
AGACTTGGGAACTTGGGAAACAACTCTGGGGCCATTTGGGAAAGGGGAAG
GGTGGGGAGGAGATCTCGGCCCTGATTTCTGGAAGCGTGGGTGTGCCCAT
GCAGACCTCATGCTATAGCGAAACTCCTCACTCTGGAGAAACGATTCTCC
CCATCCTGTCAGACAAATGGGCAGCGCTGGGAGTTCTCAGCCATGCTGGA
CGCACGTGGCTCTACCCCAGCTCTGTCTGCTGGCTGAGGGAGGGTGGGGG
AGGCTGGCTGCACCAGTGCAACCAGTTTGGCCGATCCATGCGTTGCTCTG
GTTTTTCCAGAGCTGCATGCAGGCCGCCTCACTTCTTTTCTGCTGCTGAA
ATTCTCTGCTTTCCTCCTTTCCCCCCACCCAAAAAAGATGTGAGAACATC
AAATTCCAGGAGCCCGAGATGGTGCTGGTGGACGTGGGGAAGAAATACCG
CAACTATTTCCTGCAGGATGTGGTGATGAGAAAGATGGAGAAAGCCTTCA
GCAAAGTTCCACAGGGTGAGAGAGTCCTCTTCCTTCTACGTGGGATGGGG
TTCCCTCCACTTGGGATGGGATTTCTCCAGCTCTCTTGGGGTTCTCCTTC
CATCTCTGTGCTCCCATGGTTTGCAGCCTGATGATCCTTTAGGAAAAGCA
GCATCCCTCTGTTCTCTCTGTGCTTTTCCCTTTTGCCTTGTCCTGGGTTT
TCCCCTATTGTAGCTCCTCCATAGAACTGGGGTTGATGTGGATCTGGATT
CATTATAAAGGAGGGATGACTGCCTCAAACTCAGCATGGTGCAGATACGC
AACCAGATGAGGATTTAGGACTGGGGTGCAAGGGGGAAAAAAGTGCCAGG
TGACCCCCTAACGACCCCCGCTCTCTGCCCTTCCTTCCAGCTGACATCAC
GCTGGACCCGGACACCGCTCACCCTCGCCTCAGCCTCTCCCTGGACCGCC
GCAGCGTTAAGCTGGGAGAACGACGCCAGGAGCTCCCCAACAACCCCAAA
CGCTTCGACTCCGATTACTGCGTCCTGGGCTCCCAGGGTTTCACCACAGG
CCGTCACTACTGGGAGGTAGAAGTCGGGGGCAAGAAAGGTTGGGCGGTGG
GGGCTGCACGCGAGACGGCTCGACGCAAAGAAAAAACCATGGGGCCTCAT
CAAAAAAGGGAGATCTGGTGTGTTGGCACCAATGGGAAGAAGTACCAAGC
GCTGACGGCCATGGAGCAGATGGCTTTGTCACCCAGCGAGCGGCCCCGGC
GCTTCGGTGTCTACCTGGACTATGAACGGGGTCAGCTTTGCTTCTACAAC
GCTGAGAGCATGACCCACATCCACACCTTCAACGCTTCCTTCCACGAGCG
CATCTTCCCCTTTTTCCGAATCCTGGCTAAGGGCACTCGTATCAAAATCT
GCACCTGATGGCCCTCCAGCTTCTGATTTTTTTTTTCCCTTTTTCCCCCC
TGCCTCATCCTTTGGGTCCCACTTTGGGACCAGACGCTGCACTTGTTGTC
TCGCACCTGCTTGCTCACAAGGCCTCTTCCCTCCTCTCTCCTGTCCCAGC
CTCTGTCCACGTCCCAACTCTTCTCCGGGGTCGCGATCCCAGGCTGGTTT
GGTTTGGAGAAGGGATCCAATCTCCTTGCTGGAGGTTTTCCCTTCAGCTC
TTGGTGCTATGGGCTCCCCTCTGCCTTTCCCAGTCCTCGCAGCAGCTTTC
CAGTGTGCTCTTCCCCGTTTTGTTTAAAGCCTGTGGTCGAGCTTTGCGTT
GTTTGCCCTCTTTGGATGCAGAGCTCGAGCTGAGGATGCTGGGGTCTGTA
CATTGTGACACGAGCACTGCTTGTGCCCTCTTGGCCATTGCTTTCTGAAA
```

FIGURE 10

SUITE 35

COSMIDE.txt

```
GTCACTCAGATGCACCAAGGAGCCTCATTTCTTTTTATTTTTCAGTTCTG
GGGCACAACCCTCTGCCCACCTCCCACCCAGCCACCATCTGGACCTCAAA
CCTTCCACGTTCTCCTATTCTGCCACTTGTCCACCTTCCCCTTTTGCTCT
TCTTCCCCCTCTGGGGGTCTCCAGCTCTCCCTCTGCCCCATCATTCCCTC
GCCAACCATTTCTTGTGGGCCTGGCACTTTATTTAGGGCCACGTAGGCCG
GGGAGGGTGCAAAAAATTGGGCAACTTCCACCTCTGAGGCTGCTCAGAGT
GCAGCATCGCACCAGGCCGCACCGGTGGGAAGCAGCCTTGTTTCCCCTTG
CAGCTTAAGAGCTCTCTGAGGTGGGGGTATTTATTTTCTCTTCCCTTTTC
TCAGCTGCTGTTGAATTTCCAGCTGAATCCTGTCCCACCAGAGAGACTCT
GATTGCACCCTGTTGTGTTTTACTTCTTTTTGTTGGTGGATTGGTATTTT
TTTTTTCTGTTGGCGTTACAGAGCTAGTTCAAAATATTTTTGGCTAAAAT
AAGAATTAAATGGAGATCTAGTTTTTTGAAATGTCAAGAAATAATAATAA
TAATAATAAAGAATAAAGAATAAAGTTTTAAAGCTGAGCCTCTCCCTTAT
TGAGAGCCCCCAGGGGACAGGAGTTGTGGTGCAGGCCCCCCAGTCTGCTG
TTAACTCCTGCTGGTAAGATGTGACTTAAGCCTTGCATCGTTAATCTTAA
CTTAATTAGCAGTAATTTGGATTGGGCTGCTTCCCTTCAGCAGCTTGTAA
AGGGATAGAGGCTGCTGGGTGAACTGAGCTCTGTGTTACCACCTCTCCTG
CTCTCCCCACATGTTTTTGGTGGTGGTGGTTGCTTCTTTTTGGCCACGGC
TCTATCTCCCCAGGTGTGCACTCACTGTGGGCTGCTACTGCTCCTGAAAG
GGCTCAGGGAGACATTTGAGTCCCTTCGTCCACACGTGGGAGGAGAGCAC
TGATGTCCCCATCCTTAAAGTTGTGGGCACAGCCTTGGTGGCAAATCCAG
AATGGGATATAATGCAGCCATGAGCTCAACAGAGCGCTCTTTTATTGAGT
TTTGTGCATAAAATCTGTGTGTTGTTACCACATCCTCATCTGGTTCCAAT
GGTGACTTGCCACACCCGGACGAGGTTATCTGTGTAGCCAGCAAACAGCG
TCTGGGGAGAGAAATGGAGGAAGTGGATCATGAAAAGATAGGAATCAGCC
CTCGGTGTGAACGTAAAAATCTCAGAAGGCAGCTCCCAAAGCGGAGGTGC
TGGAGGAAGGTGGGAGTTTTAAGGCTGCAGGAGGAGCAGTGAAAAGGGAA
AGGAGAAGGGGATATTTCTACCTGCCCATCTGCAGACCACGCCAGAGAGG
TACACTGGGGAGGCTCAGCTTTGCTGCTGGTGCTGATCACCTCCTGCTTC
AGCTCATCCACAATGATTTTGCCTTCCAGGTCCTGTGCAGGACAGAAGAG
AGCGTGAGGGACTAAGGTCCTGCAGGGAGACTGCTGTAGCCAAACCCAAC
CATTCCAACTCAGAACAGGCTCAGGGTGCTCAGAAACAGCCTCTGGGTTT
CCGCACAGGGATGCAGTCAGATGGCATCGAAGTTTCATCACAGCAGAGTG
GTGGCTGTGCCCCACACCACCCTCCCAGTCCAGGGGATGACAGTGCCACC
AGCATGACCCATCCCACGTAACCAAAAGGGCTCTGCACCAAGGCATCTGT
GGGGCAGGGCGAGGATTTCGACCACAACTCTGCCTCCAAACCCACAGGAT
AAGGGAAGTGATTCTTTAGGAGGTAAATAGGGATGTCACATACCCAGATC
TTGATGCTGGGGCCGGTGGCAGCGCAGAGCCAGTAGCGGTTGGGGCTGAA
GCACAGCGCATTGATGATGTCCCCTCCATCCAGCGTGTACAGGTGCTTGC
CTTCATTCAGGTCCCACAGCATGGCCTGGCCGTCCTGGGGGGCAGCAAAG
AGGAATCACAGCAAACCATCAAACCTGTGGCTTTGTTCCAGTTGTCCATC
TAAAACCTTCCAGCTTGGAAACAGCACTTGATTTGTGACTGAGATGTGGG
TGAGTTGCCACAGGACAGCAAGAGGCACATAACTGAGCTGTGAGAACAAC
AGAATAAGCTGCAATTTGGCCTCAGCTTTCCCCCAGGGTGTACCTTGCCT
CCAGAAGCACAGAGGGAGCCATCAGGGGAGACAGTCACTGTGTTCAGATA
TCCCGTGTGGCCGATGTGGTTTGTCTTCAGTTTGCAGTTAGCCAAGTTCC
AAACCTAAATGAGGGTAAACGTGACAGGCTCAGAAATATGGAGGAGAAAA
AAAACAACCCTCTCATGATCACTGCTCAAATATTCCCCAGAACGCCGCAC
AAACCCCAAAGGAGCTGCTCCTCTCACCTTCACCAGCTTGTCCCAGCCAC
AGGAGACAATGATGGGGTTGCTGCTGTTGGGGGAGAAGCGCACACAGGAA
ACCCACTCAGAGTGGCTCTCGTCCTGAGGAGAGGAACAGCATTGGGTTGA
AAGCAATGAAAAGCATCCCCAGTCCGAGCTGCTGCATCCCACTGCTCCCT
GAGCCCCTCATAATTGCAGGACGTGTCCTCAGACCCCCCCCAGAAAGAAA
GGTCAGCAGGCACTGTGTCACTTCTAATCATTAGGACGGAGCTGGAGAT
GTGGATTACGGA[illegible]TACGG
```

FIGURE 10

SUITE 36

```
ACTCAGAAACAAGCAGAAAGAGGTTTATTTTCACAGTGTGGAAACTCAGA
TCCGTTGCCTCACCTGCACCGTGTATTTGCAGACACCCAAAGTGTTCCAG
AGTTTGATGGTTTTGTCCCTGGAGCCCGAAACGATCTGGCGGTTGTCGGA
GGAGAAGGCGACGCTCAGCACATCCTTGGTGTGGCCAACAAAGCGGCGGG
TGGTGGTTCCTCTGCAGGGACACCAGGAGGGTCGCACGGGAGGGACAAAG
CTCAGCAAACCCCCATTAAATTAATTAACCCTCCCCTAAATTGAGGAGAT
CGTGCTGCAGTGCATAAATTCTTAATGAACACAACTGATGGAAGCAGGAA
GGAAGCTAAAACGGAGTCATCTCCACATGGGTTGAGGAGTGGTGGTTCCT
TCCCTCCTTCCGAACAGGAACAAAAGGGTGCCAAAGCTTTTGATATAGGG
TTGGAATAATCATGAGGAGTTTAGGATATAAAACTCAGCTTCCGTGGACA
CACAGCAGCGTAAGTGCTGAACGCTTTTGGAGGATTGGGGTAGTTCTGCT
TCCTGAGGAGTTTCTTCTCCTATAGTACTCCCAAAAATCACAGTGCAAGA
AGAGCCGGTGCTGCTCCAACCTCACCCCAAACTCTGTACCCCAAAATCAC
ACCGAAGGAAAAGCCTGCTTGCTCCAGTCTGTACCCCACAGCGATGGTGA
AGGAAGAACCAAATCCCCCCCTGCTGCTCCACCTGCTTCTCTCCCATCAT
AATTGCAGGACGTGTCCTCAGATCCCGGAGGATCAGCAGACTGTGTCAGG
TGTAATCACTGGGAGAGTGAGCTGAGGGAGGAACCGCTTTGGTCCTCCCT
CCAAGCATGATTTACCACCCAACCTGAGAGGAACTCACCTCATTTTCACG
CTGTACCGCACACCTCTCACCCACCCCAACACCCAAACAAAACACAGAGC
CCAGCTCTGCCCCAAACCCCCACCCCAAAGCCCTTTCAGTCCCCAGGACT
CACGTGGTGAGGTCCCACAGCCTCAAGGTGCCATCCCAGGAGCCCGACAG
CGCAAACTGCCCATCGGAGGAGATGACCACATCGCTGACAAAGTGCGAGT
GGCCGCGCAGGGCGCGCTGCGGGATCCCGTAGTTGGTCTCATCTCGGGTC
AGCTTCCACATGATGATGGTTTTGTCTGGGAAGGGGGAAAGGCAGCGGCC
TCAGCTCCAACCCTTCTCACATTCCCGTCCTCACTGGGCTTTATCTCCCT
CATAGCAATGGGGGGGTTACACAGAAGCACCGCACCCCTTCCTCTCAGCC
CCCCAACCGCCTCCCTACGTCCTCATACACAGCAGCCTCCCCACCCTGCA
GCTCTCTGTCCCCGAGCCCTGCACCCCATTCATCACCTCCCCTCCCCCAT
GGTCCCCCCCAGCCCCCTCCTCTACCACTGACGGTCTCCCCTTATCTCCC
ACAGTCCCCTCCATAGGCCCCACAGTTCCCTGCCCCCCCCCACCCCACAG
TTCCGCCCCCCCCGCCTCGGACGAGGCCCGAACCCCTCAGGCGCGGCCCT
CACCCCGCGACGCGGAGAGAATCATGTCCGGGAACTGCGGGGTGGTGGCG
ATCTGCGTCACCCACCCATTGTGGCCCTTCAGGGTACCGCGGAGGGTCAT
CTGCTCCGTCATGGCGGCGGCGGGGCGGAGGGATGGCGGCGGATTCAATA
AAGGGCCCGGCCCGGTCCGGTCCTACCGCCCGCGATGGCCGCCAGCGCGG
AAAGAGAAAGAGGGAGGTGACTTCCGGCGGAAGCGGAAGTAGCCGCTGGG
TTGTACGGCAAGAGGGGCAACATGGCGGCGCGCATAGAGAGCACGCTGAA
TGGGGGAATGGGCTTTGGAGGTGGGGAGGGAAGGTTGTTCTCTGCCGCTG
CAGGGACACGAGGTGCGGGCAGAGCACCTTCTTTAACATTTGCTATTATT
TAACGTTTTACATTTAGCATTTTTATTATCCCTGTTGTGCCAGGACGGAG
AAGAGCAGGGTGTGCAGCCTGTGCTTATCACCTGCAGCTGTCCCTGCACC
CCACAGCCAACCCAAGTTTGTGACGCCTGAGCAGGATCTGACCCAGGAAG
GCAAACAGAAGGTCTGAGTCCTCCTCCCTTTCCTTTCCCATCCCTCCCAC
GCTGCAGTTTGGGGGCTGTGACCCGTCCGCGTTGCTCAGTGCTCATTCCG
ATGAGCAGTGGCTGATGGTGATGTTCACAAGTTTTTGGCATCCCTGTGGG
TTCCACCCCCGTTTTGTCTCACCAGCCTTTTTCTATCCGTCCTTATCAGC
AGATCATCCTTGTTATTAGATCTGTCTTTTTCCAGTCACGGCTTTGCATT
TTCACCTTGGTTTTACCACCTAACATCAAGCCTTTTGTCCCCATCTGATG
ATATTCATGCAGATAAATCCGTAAAGCAGGGAAGAATTAAATTCTGGCCC
CTTCTACACCCATTTAGGTTTAGATCTTTGCAGCATTCAGCCAAGACGTG
CTTCCAGAGCCAGGAATAACGTGTCTTGATGTGCCAACACACCTTGAAAT
CCAGAAAATTGCCCCAAAATAGGCATGACTCAGCAAGCACCGTAGTGGGC
ATGATTTGCTTGGGTGACCCCGTGGGTAAGGAGCCATTTGTTGGACACCA
CGATGTCGTTTTTCACAGCCCTGTGAGCGCAGCGTCTTAAATTGCCCTCC
AGACATTCCAAATTTGGAGAGCTCAAAATGGCAAAGGTCAAATGGCGTCA
```

FIGURE 10

SUITE 37

COSMIDE.txt

```
GCCCTCCGGGATGAAGGAATCTCTGCCGGGGTTTTCCGTTGGATCACAGC
AGGAGGATTTGCTTTCCTAAAGCATTAGAGTGACGTGGAGAGCCCAAATC
GGACCCAGTGGCCACATTCTCCCAAGGGAAAACCCTTCGGGTGCCCCTAC
GGTTCCTTTTCTAGCATGATAACAAACTTCTTTTCCATCCGCCCATCCCC
TTTTGGGTTTGGAGGTTGACAAATCCCCACTGAAATTCCTATGTTGCACA
CATGTCCTTCATTCTTTAAGTAGGAGTTAGCAAAGGTTCCGCATTGACTT
AATTCAGAGCGAGATCAACAATTTTAGGCATTCTTTATGAACTTCACATT
GTTTTATGCTGATCAGCAGCAAAAAAACATACAGGAATAGGAGTGTGTCT
GTAGGAGTGCTCTGCATTTTCTTGCTCGTTTGGCTGATTAAGGAAGCTGG
GAGGAAATGTTGTGAAATAATCCCAAGTGATGAGAGACTGTGGGTATGGG
AGGAGATGCCCTCTGTCCTGGTGAGCAGTAGGGACAGAAGACCTGAGCTC
ATTTCATATATCTGTATATTAAGGCAATGCTAACCAGTGCTGTCGTGTTA
TTTGGGGCCAGGAGTGGCTTCTGCCCCGTTGGTGCCCATAAACCAGTGCT
GCCCCATTTGGGATTGGGGTCTGCTCGCAGACCACATCCACCAACCAACC
CATGGCTGATAGCAGAGAGGCGACCAGGTCAACCCTCCATATATCTCTGC
AGAAACCTGTTCCTGTCTATACAGGGATCCCCATCCCTCCCCCAGCCCTC
CTTCCATCCTCGGCATTTGGGTTGGCTATAATTAGGCTCTGGGAACGTTC
CCCTGCTGCCAGCACAGCTGTCGTGTCTGCAATGATCCTTCCAGCTCTCT
GCGGACACGCAAACCCTCCAGCAATCCTAAATACCCATTTCCTGCACTCC
TGGGACAAACTGGGAGCTGCCAAAAATCTCCAGCCCCCCACAGACGTGAC
CATCACAGCACCAAGGAGCAGAGCAAGCGCAACGTGATTACGGTGCAGGT
CGGGGTAAGCCTTTCTCTTTCTTCCCACAGCCCAGGATTTGGGGGATCCT
ATTGGCTCTATGGGATCTGGGAGATGCAGGAGAAATGTGATCCCTTTGCT
GTAGCAAAACAACCTTTTAGAGTCCTGCACCTGAATCTGGCAGTACTGGA
AAGCAGGAGAGGGATTAAGAGTCCTTCTGCATTATCCTGCTCATAGGGAA
ATACAGCACAGAAATCATTGGGGCTGCTTCCTTTGCTTTCTTGGCACAAA
TTTAGGTCCTCATTACAGCGTTTCTTTGACTGAGACCCCAATAGGATCTA
CAGGGGTAGAACAAAGCAGACAAAAAGTGATTGATGTTTCCTATGCGATT
TGTTGCCTTTTCCCATTGAGATTTCTGCTTTTCCTATGGGGCTTTTTGCT
TTTTCACAGCTTTTTTTATTCACTGTAGTGAATAGAAATTTTTAGGGCTT
TTAGGTCATTGATGCTGTTATGAACACAGAGATGAACTCATAACACCTTC
CTGGTGTGGTTTGTCTATGGGATAGAAAGGAGCTCATGGTGCTGTGGACA
ACTAACAGAGGTGCCTGAGGGCTGGGCCCTCTTTGTGCCCCTTCTGGGGG
TCAGCAAACTCCTTTTATTCAGATATAAATCCCCTCATCCACAATTTCAC
CAGTCTTCCCAATGCAGACCCCAAAAAACATCCCCAATGACAAAGTCCAC
GAACTGAGAAAAGCAGCAAAAAGCCTCCCAGCCCCAAATATTTATCCCTT
ATCCCATTTATTTCTATGGGCAAAGCTATTCTAGGCATCAGGAAGGTGGG
AGATTCCAGGTCAGTTTGTTCCTAATTGTGATCTTTTAATGATGTTTCTC
CCATCAGGTGGACATTTGGAAGTGGTTCTGACTGGGAAGAGGACGTGATG
ATGGCATCAGGTAGAGCTCAGAAAGTGGTATTTATCAGCAAAGCAATTTT
CCAGGTCTGTTTTTTCCCATTTTTCCCATATTTTTTTCTTATTCAGGGAA
GAGGAACGCGGATCTTGGTGAGTGATTTTCTTCCTTTTACCTTCAAAAAG
TCCCTTTCCATGTGTAGAAATGGATATACGTACCCCCCACTGATACCCAT
TTCCTTTGTTCTGTCCTTATATTTATACTTCCCCATATTTTGAACACATG
AAAACAAAGCCCACATTAAATAAATTCATAAACAGTGCAATTTTTGGACT
ATTATTTTCCATAGAAAAGTATTAAATCAGTGCAGAAGTGCCTCTGGAGG
TGACTTCTGCAGCACCCAAAGAGAGAGGCGTAGGGCTGAGTGCTCTCTCT
GTCTCTCTTTTAGAAGAATGGGATGCAAAAATCAGTGAGTGCCCTTTTTT
CCTCTCCCTTCACGGTGAGGTATGGGTGTGGAGGACCTGAATTAATGTGA
ATTCCTCTGTTTTAAGGGAAGCTAACAGAAGATTTTGGTAAGTCGCTTAT
TTTCCTCGATCTGAGTGCATATTTCTACACCTTTACCATCAGTGATGACC
AACGTGTGTATGCATTTCTCTTTATTCCATTTAGAAGAGAGCGACACAGA
GCTCGGTGAGTGCTTTGGGGTCTTATCAAGGTGGAAAGATGCCCCTCTGT
GCAACAGTGGGGATTGGGAGAAGCCCTTCAGCTCTTCCATTTATCCACAT
CTGATACCCAGATGGAGTCAGGATGCAGAACTGGAGGAGGAGGGCCAAAG
```

FIGURE 10

SUITE 38

```
CTTTGGGCATTTTGGGGTTATTTTTGTTCCTCGAGAGCTCCCAGGATTGA
CCCGTGTCCATTTCTGTGTTATTTCCAGAGGAATGTGACACAGAAGATGG
TGAGTGTCCTCCGTGAGAGGGCTCAGAGAAAGACTTCCACCAAATCTCCC
TCCTTTAATGTATATTCTGATGTATTTATTTAAGGGGATCTCGCAGCTGA
GATCGGTAAGTCGTGTGTGGTTATACACCCCTATTTGTGCCTCCCATCAA
ACAGGGCTCTGTGCAGCTTGAGTTGGTTCCCACAGGGTTTGTCCCCCACT
CTTCACACGAATATGGGGGTAAAACCCAACAAAATGGCACAGAGGGATTG
CAGAAAGGGCGGGCGTTGGGTGGCGCTGTGTTCTGATCCAAGGGAGGGTG
AAGCTCATGAGAATGGTTCTTTCTTTCTCTTTTTGAAGACAATCTGACTG
CAGAGCTCGGTGAGTGCTTCCCTTTCCTCTCTGCTTCGTTTCACTGTTGG
GTTTTTAGGGGGGAAAAATGCTTATTCCCCCCATAAACACACACATGTAA
CCCAACCTGGGCTGGAAGAAGGGTCCAAACGTTCATAACTGCAGACTGCA
ATTATCATTCCCAATTGGAAGGTGATTCCATCATGAACCATCCACCCATC
ACAGTGGAATTCTGACAGTGTTTCTCTCTGTTTTCCCTTTCAGAGGAACG
TGATAGGAAAATCAGTAAGTGCCTTTTTCCTTCCAGAACTGATGGGAAGC
GATGGGTTAGGGTTAGGGTAAGGGTTAGGGTAAGGGTTAAGGTTAGGCTT
GGGGAAAAATAAGTTAATACATTTCATTATGGCTTAGAATTGAAACTAAT
GTTCATCTATTTCTTTGTTTTAAGGAAAGCTCACATCAGATCTTGGTAAG
GGTTACTTCCTTTAAACTATCCTTAATTCTGCAACAGTGCTGGGTATAGA
GTAGAAAAATATGCATGTGAAGGTGTATGTATGCACATGTTAATTCATTC
CTATTTATGTACTCGTTAGTTGCTATATATGTATTAATTTATTCACATTA
TATATATATTTGTATATATTTGCAAATATTTGTATGTATGTGTGTATGTG
TGAAGAGATTGGGGTTTCCTCTGGTTGAAGAGGGGGGTGAATGACAGCAG
GTGTCCTTAATAAGCCTTATTTTCAAAACACTAACAAGGAGAATTGGGAT
ACACAGAAATAAAGCCTAAAAATGGGAAAAAGAAAAGAATGAAATGGGTA
AAATATTGAAAAGAACAAAAAGTTTGGAGAAAAGAAATGACAGTTTTGGT
TGGGTTGGGGCTGCTCTGCATTTCTCCGCTTATTTTCTCCCTTTGCTTTC
AGGTGATGTTGACACAAAGCTCAGTGAGTGGAGCTGCTCTTCCTGCCCCA
CATTTAAGAGTATTTTTGGTATTTTTAAGACTGTTTAAGAATATTTGGAC
ATTTCCTGTGGAAAATGGATTTCTGGTCTGTAAAAAAAACCTGGGGCTTA
TTTTTGAGGACGGAATAAATGTCCCAAAAAAGGGGGATTTTGGCATCAAT
TGACTGGGAGGTGAAAAATAAAAGCAGTGATCTGAGCGTGTTGGGGCCAA
TGGATGAACCTCAATGATCATTGTGGTCCTTTTCAATCCAGGCCATTCTA
TGATTCTGTGAAAGAAAAGAAGATAATTAACATTTAATTTTCTTCTTTCT
CTTCTCATTCCAGAGGAACGCGACAGGAAAATCAGTGAGTGTCACTTTTT
TGGGGCCAAAACCCTCTGATTTGGGGAAGGGATCCCTGATAGAAGTGGTT
AATCCTGTTGGTTTTTCCCTCCTTGCAGCCAAACTCTCAGCAGAAATACG
TAAGTCCTTTTCCTCCCCAATCTGAACTGTTTCTTTGTATTCTTAGACTT
CCTTTTTTTTTTTTTTCTGTTTTAATTAAAATAATGCTTTTTTTTGGTTG
GTTTTTTTTTTCCCTATTTGACAGGCAGACTGACTGCACTGCTGGGTGAG
TGGTGCCATTAAATCCGTGTGTGGTTTTGGGCTGAAAACCCTTAAAAATG
GGAACTCTGCACCCAGACAGCTCATCTCTGTGCTTTGTTTCATTTGTAAT
AGAATAAAAATGGGGGGAAATGGGCAAAATGAGCATTGCAGTGAGCAGAG
CTGCTGTCCTGGGGCAAGAGGGCACCGCCGTGTAAAAAATACATATATTT
AACCATTTTTCCTTCTTTTTTTCCCATTTAGGGGACCGTGACTCAAAGCT
CCGTGAGTGCCACTCTCCTCCTGATTAAAATCTGAGTGAAGATGTGGATT
TTCCTCAGTGTGCTCCTACAATCTCACTTTTTCAGCACAGTTTTCCCCAA
ACTTTGTGTTTCTCCACCCAACCCCTTACACTGATCCTAAATGGGTGTAT
TGCCTGAATCAGTGGTTTTCTTCCCTATTTTTTATCTATCCTGTTTTATT
CCAGTATATGTTTTTATGACATAATTTTATGACATATTTTGTTCTATGAT
GCCCATAGACCTTATTACCATTGCCTGCCCTGTGTGGATCAGAAAATATA
TTTAATATAAAACAGATATCTCTACTGACAGTGATTTCTGATGCACCCAT
GAAGGAAAAGGATTTAAAATAAACTTTAATTTTTCCCTTTTTAGGCAAAC
TGACAGCAGAACTCGGTAAGCCATTTTCTTCCCCATTCCCATAAAACAAA
TGAAATTATGGA[illegible]CAGCT
```

FIGURE 10

SUITE 39

COSMIDE.txt

```
TTGCTCTAGGACGGTCTGAAAAGTGACCAAAATCTGCTTTTACTCATTTT
TCTTCTTATTTTTTTGTAGCAAAGTGCGATGCAACGATCAGTAAGTGCTG
CTGCATGTGGGGGTACCTCCATCTTCGGGTCATTTTCTGCTGTTTCAGCA
TTGAAAGGACATCAGAATTCCTTAAATCCAACAAAATTGGGGTCACTCGA
AGGAATCTTTGCAGATATGGGGGAAATCAGAGCCAAATTTTGAGGGGGGG
AGGGAAAATCTCAGGGGTGTTTCAGAAATCCAATGGGATCTGATGGTATT
TTCTGCTCTCAGGACTGTTTACAGTGGAACTCGGTGAGTCCGTTTCCTTT
TTGTTTTTTTTTTCTAATTATTATTTATTAGTAGTATTATAAATCAATAT
TACTGTTGCTTATACATATTGTTGTACATTATATACATAATACATACATT
ATATACAGTATATAGTATACAGTAGTATATAATATTATGTATTATATATA
TATAATGTATTATAATAATGTCATATCTAATATATGTCTGTATTAGATAT
AATGCATATATATTATTGTACTACAGTCATATTATAATACATTTACTTAT
ATCTGCCTTTTTCCACACGTTTCATTGACCTGATTAAAAACTAAATCCTA
AAGGCAGAAGAAGATGAAAACCCCCAAATTAACACCAAATAATTGCAGCT
ATAGATCATATCTATCAAAGCAAATTTGCCTTCAGTCCACATCACGAAAT
TAACAATAGAAAGGTTTAAATTTGGAACGTACAAACAATGACAAATAACC
CCCAATGGCTTTTCTCTTCTTGCAGGAGAGCGTCACACCAAAATAGGTAC
GTGAGGTGTTTGCTACCTTCGTTTGGAAGGAAGAAATTGCATTAATAAAA
CCTCTGTCCAATATGAAGCCGGGGTCAAATTACTCATAAATCACCACTGA
TTGTCCATGAATTAACAGGGAAAAAAAGGCTAAACTTGAAAATAACATTT
TTTTCATCTCTCTTTTAAGGGGAACTCACTGCAGAAGTTGGTAAGTCTCT
TTCCCATCAGTTTAAGCAAAAATGGTTCATCAGATATATAATAATCCCTT
ATTTCTGCTTGTTTTTAGGGGACTACAACAGGAAACTTCGTAAGTGCCTT
TAACTTCTCCCATTAAGAGTTAAACCTTTCAATATTTTTGATGCTTCAAT
GTGCTGAAGCCACCAAAAATGTGTTTTAATTGTAAAGGGGCTGAGCGTCA
AACCTGAACACTGCCATGTTGGGGGCTGAGATTCGTGGGATTTGGGTTTT
CAGTGTGAAAATGCCTCTGGGTTTCTGTGCCTGAGCTCAGGGAAACACGA
CCAGGGCTTCCCAGTAGGAATGAGACCCCAAAATATTTCTACCTGGGGCC
TTTTCCCATTGGGAATTTATTCTGTAAATCCATATTTCTCCACGTTTGAG
CGTCACTCATCAAATGTCACAATCTTGGCAATGTTGAGAAGATATATAGA
TATCTATTTTAATACTGATTAATATGGAGGTGTTTGTGTTGGTCAGTGAT
GTCATCGGGAAAAGATCTGAGTCATTGAATCCCCATTTCTTTTCTCTTTA
TTTTAAGGGAAACACGCAGCAGAACTTGGTAAGGGAATTCCCTCCCTGGG
TTTGTTCTCTTGTTTTTCTCTTTTGGAGGGGGATTTTTTCTATGTCTTCT
TTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTCTT
CTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTC
TTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATG
TCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTA
TGTCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTC
TATGTCTTCTTTCTATGTCTTCTTTCTATGTCTTCTTTCTTTCCTTCTTT
CTTTCCTTCTTTCTTTCCTTCTTTCTTTCCTTGGATTTTGAGCCAAAAAA
ATCACCTCAAAATGAGCCTGAATGTTTGCACTGAGGACTGAGCACAGCTG
GGCACTAATTCATCTTTATTTCTCTCTTATTTACAGAGGAACGCGATCTG
AAAATCAGTAAGTGCTGCCCCAAAGCCATAGGGCTATGCTGGGCTTCATC
CCCACAACATGAATTTTATAAATTAAATAAATAAATAAATAAATAATTTT
ATATTTTATGTATTTGATATTAGCAGTATTTAAAAAAAAGAATAAAATAA
CTCAAGAATCTTAGGATCAATAGTAACACAATGATGCAACGTGGATACAA
AAGCAGTAATTCCTATTTCTTTGGGTTTTTATCCTTCCAGGGGAACACGA
AGCAGAGATACGTGAGTGTTATTTTATATACTCTATAATGGAAAACTTTT
TTCTCTGTAATATAAAAATAGGCTTTATTATTTGAGGGGTTTTTTGGCTT
AACGCAAATGCGAAGTGCTTGAAATTCTACGTATGAAATAGAGGATTTCC
CATAGAGAAAAACAGCAATTTGGGGCTGGAATAAAAGTTTCATTTCCTTG
CTGAAAAGTGAATGAAAAGGGGGGGAAAAGAACATAAAAATTGAGTTTTT
TCCCTCATTAATCTGTCATGAAATGGGTTGGGTTCCTGAATGGTGATGTC
AACACCTCGTTTTGGGTTCAGCCCAACATAATATGTGTCTGTCCTTTATT
```

FIGURE 10

SUITE 40

COSMIDE.txt

```
TCTGTATCACTGGTGTTAAAGAGAGCTGTTTTGAACTAATATCTCTTTTT
TAATTACTTTTTCTTTTTCTTTTTCTTTCCTTTTTTCTCCCGTTTCTCTC
TGTTTTGCTTTAAGGGCGCCTCACTGAGCTGCTCGGTAAGTGCATTTCCT
TCCTTGCATCTGTCAATCCAGCAACAAACCAAAGCCTATTTTGGGGGGGA
AGGAGGGGATAAAACACAATAATGATGAAATCAGTGCTTTGGAAAGGGTG
CAATTATTATTTCTCCTGCAAATGAATACTTCCTTTTCCCTTTTGTTTGC
AGAGGACCGCGATTCCGATGTCCGTAAGTCCTTTTGTTTGTCCCGGAGCT
GTGAATCCTCCAATGGGAAATGCAGAATTTCAGAGTCTGCCCCAAAAATG
ACCTTTTTGAGGCTACAAGGGATGGGAAAATAAGGAGAAATGTCCTTATT
TATTGATCTCCTTGTTTATGTGCAAAACTGGGTGACTCTTCTCTGCCGAA
CACGTTAGAAATAAGAACACAAAATGGGAGGAAATGGTATTTATTCATAT
CTGTTGTTTTTCTGTTTAATTTTTAGGAGAACAGGACATCCTCATTAGTA
AGTGGCACTTTGGATTGATAAGAAATGCAGCTCCTGGGGACGTTTGGGTG
CTGCGATTGCTGGCACTGCTGGGGCTTTGTGTTGTGGTGGAAGTGGAATT
ACTTCAAAAGAAGAGAAGAATGGAATTATCTGGAGAAAAAGGGGAATAAA
TGGAACTGTTTGGGAAAAGAAGGAGGAATAGAATGGAAATATTGGGGAAA
AAAGTGAAATAGAATGGAATTATTTCAAAAAAAATGGAATGAAATTTAGG
GAGGGGGAAGGGGAAGTGGAATGGAATTATTTGGGGGAGAAAAAGGGGAA
AATTGAATGACTGGGGGGGGAATGGGGAAATAGGATGGGAGTATTTTAAA
AATACAGAATTGTGAAGGTTTCAGCCCATCTCAGAGAGTTTGGTATCCTC
GAGTTCCCCCTTTGCAACCCATTGAGCATCCTTGGGATGACACCAAATTC
TGTTTTCTCCTTTTCAAGGGAAACTGTCAGAAGAGCTCGGTGAGTTATTT
CCACTTCTTACATACAAAACTGATTCTGGATATTCTTTTTGTGTGTTTTC
CTGCTTTGCCTCTTTGTGTTTTAAGAGGCAACTGCAGAAGGAATGGCACA
AAGGGTGCAGAGGATCTTTGGGATAAATAACAGGGAAAACAGGGATGGGA
TAGCAATGAGTTGGTGCAATAATCTATGGCACAAAAGGTGACGGCGTGTT
TCACATTTTGCTTTTTCTCTTCCTTTTAGAGGAATTAAGGGGTCGGGAAG
TTGGTAAGTGAGATTCCTTTCCCTCTTCTCCCCAAAAGGATAAGGGGTAA
TTTGGATTCTGATCTCTTTTTCTCCCTTTTTGTTCCTAGAGGAGAGTGTT
CTGGAGAGGGGTGAGTATCATTCTCTTTCTACTGCTGCTTTTGACTGAAG
GAATCCCCCATAAGCATGCTGGTGGGATGGGAATTCTACATCTGATACAC
AATTATTATCATTTCTTCATTTTTTATACACAGAAATAGATAATTTTTTT
CCTTTCTTTTCTCTTTTCCCCCTTTTTTAGAGGAACATGATGCCAGAATT
GGTACGTGTCCATCTCCCCCTGCTTTTGTGGTGTCTTCAAGAAGGCCAAT
GGGGTCATTTGGGATTGTTTGGGTTGAGGATTGGGTTCTTGATTGAATTT
GGGGGAGGATTCAGGTGCCCAAACACAACATCAGGTCCCATCTCATGTTT
TCCTATGGGCTTGGATCCTTCTGTTGGATACCTAAGAATACCTGAAATCC
ATAATATGCCATTAGAAGTAACACATCCATCAATGATATATCCATAGAAT
ACAAGAGAACGGTCTACATTTACTTCAGATCCCATTTTCAGGTTAACCAT
GAAAAAAATACCCAAAGACTGAATGTCACCATTCAGGGATCCCGTGTGTA
AAATCATGACTTCTGCTTTAATTATAAGAAAAATGAAATTCACTGTTTTT
ATTCTCTTTTAAGATGAACTCTCAACAGAAGTTGGTGAGTATTTTTCTGC
CCTCCAGCAAAACCAAAGCATGCAGTTTGCAGTCTGTTTTGGATATATAT
TGTACGTGGATATATAACCTGTATGTTATAACACCTCTGGTTTCCTTTTC
TCCTTCTTTTCCTCAGAAAAACGAGAGAGAAGAATTGGTGAGTATCAAAC
TTCCCCCCAGAAGTGGACTTTGGTGTGTTGGGAAGATCCATACCACCACG
TTGGTGCCAAACTTAATGGAAATCCTTTGTTTTTTCCTTATGTTTTCAGA
TGAACTCACTGCAGAGCTCGGTAAGTCGTGATTATAACTCATAACGAGTT
ATAATGCTATTGTTATATATAATATACATATTATATATTGTTGCTATAAT
TCATAATAGAGCAAACAATCACAAGGCACAGAAATATGGGTTTGCTTTGA
GAGCCAAACCTTAGGAAGTGATAACACAATGGGAAGAGGACAATGACCAT
TTCTGTTGTTCCTCTTTTCAGAGCACTACAAGGCAAAAGCAAGTGAGTGT
CTCCTTCCTCATCTTCAGCACGTGAGAGATTTTGGGGGCTTTTGGGACGG
CTATGGGGATTTACACATAATAAAACAGAAGATGAGAAGACAGTTTGTTA
ACTTGAATTCAAACTGGTTTCAAATTGCTGAAATTAGACTATAAATAATC
```

FIGURE 10

SUITE 41

COSMIDE.txt

```
TCCCCAGTACCCAATTATACAATGGGATTAATTACAGCCTGCCCAGGAAA
GGAGCACTGAATTTTTTCCTGCGTCCATCCAGCATGAAGTCCATCAGACT
TAAGCTTACAGCTTAAAGAATGGTTCATTTTTTTCATTTAACCCCCTCGT
AAGTTAAAAGATGGACTTCAGCATCACAGAAGTAGCCCAGAAATAGTCAA
AAAATGGGTCATGAATTTCCAGAGCACCCCCCCACACTTTCCTTGGTGAA
TAGGAAAACAAATATTAAAACTAATTAATTGGTTTTTTTTTCTTTTTAGG
AAGATGTTTTGAGGAACACAGTAAGTGCCCTTTTCTCCCTTCTTTAAGCA
TCACTTTTCACTTTAAGTCTGCATCACAGTTAATAATCCATCTCCTTATT
ATGCATTTTTAGGGAGAGGCGAAGAAAAGTTGGGTAAGTCATTTGGTTAA
TTGGGTTTCTGCTTGCAGACCCCATCCAGGAGCTCATGTCCTCCTCTTAG
TGTCTGCACTGTAGAAATATCCAGGTTAGACGTGTAGGTAGGAAATACTG
GACCTGCGTGGAGGTATTGCAGACCCCATTTATGTGTAGGGGAAGCAGAA
CATCAAACTATTGAGCCTTGAGCTCCACGAAGACAAGCCACCCTCTTAGA
TTTCAAGCGAAGTCGAGCTGAATAGATTTAATTCTTTCTTTCCCATAGTA
AATGTGACTCTGGACCCAGAGACGGCCCACCCTCGCCTCGTCCTCTCCAA
GGACCAGAAGAGCGTCCGATGGGAATACAGCCTGCAGGAATCCCCCGACG
GCCCCGAGCGCTTCGACGCCGATCCCTGCGTGCTGGGTTGTGAAACCTTC
ACCTCTGGGAGGCACTGCTGGGTGGTGGATCTCACAGAAGGGCAGTACTG
CGCCGTTGGGGTCAGCAGGGAGTCCCTGCCCAGGAAAGGAGCCGTCAGCT
TTAACCCTGATGAAGGCATCTGGGCTGTGCAGCAATGGGGGTTCAAGAAC
AGAGCCCTCACCTCCCCTCCGACCCCACTGAACCTTCCACGGGTTCCCAA
AAAGATCCGCATCTCTCTGGACTACGAATGGGGCGAGGTGGCGTTTTTTG
ATGTGGAGAACCAAATGCCCATCTTCACTTTTCCTCTGACCTCCTTTGGT
GGGGAGCGGCTCCGGCCGTGGTTCTGGGTGGAGCTGGGCTCCCTCTCACT
GCCCAGATAACCCCGGAATCCCTGGAGGTGCTGTGGAGGTGCCTTACAGC
AGCTCTTCCAGACCGGGGTGGAAAAACTCTCAGGAAAAGCAGCATTAAAA
CCTCATTCTCCCTCTTCCCAGTCAACCATTGTCATGCAAAAGAAAGGAAA
CCCATCCTCAATGTCATCAGCATCCTCCGTGTGTCATGTCTGGTGGCCCC
CATTGATGTATGGGGTGGCTCCTGTTGGTGTCTGGTGCCCCCTATTGACG
TATGAGGTGGCCCCCATTGACGTGAGGTGGCCCCCATTGACGTGAGGTGG
CCCCTATTGACATATGGGGTGGCTCCTGTTGATGTCTGGTGCCCCCCATT
GACATGAGGTGGTCCCCATGACCAGCCCCTACCCTGGATCCAATGCCTCC
TGATTGCAGTTCCAAACTCTAGGGACGTTAAACGACCCACAGAGAGGATG
GGGTCCTCTTTGGTCTGATGGAGAGAGGTTGGCACCAGGGTAAGTCGCTG
CCTACATCACCACTGGTGTTTTGTCTCAGCAGCTGGTGTAAATTTCTGCC
ATCTGGGCTATTTCTGTAGAAAGCAAAGAAGCTCTGCTGGTGGGCAGCTC
ATCTCCCAGTGTGAAAAAGCAAAATGCAACGCATGCACCCTGCTATCCAT
GTGGCCATCCCTCTCCATCAGCTGTTGAAGGAGAAATCTGCACTCAGAAG
AGATTGAATTGGGCTCAGATCTGGCTTGGGAAGATGATGATTCCAACCAG
AGTCCAGGAGACTTTGGGGAATGCATGAATCCTATAGGAAAATGGATAAC
CCTTCATCCAAGAGCAAGCTGGCATGATGCTCTGGGGTGAAAACCCATAA
TGCCACCTGGTTTTAAGGTTTGGGGTGGCTTACAATGTGCAGCTCTGCTT
CCGGCGAGGCACTGGGAGCCCTAAACCCATGGAGAGGTCAAACCAGTGCT
GGAGGTCATTGTGGGCCCAGCTGCAATGGGAGGTAGGCAATTATGGACAT
CGCTGAAGCCACCCCACGCTCTGGGGAACTTGGGTTTTCACCTTTCACTG
CACTTTAATGGGATTTCTCATCAATGTCTGCATGTTCTTGGCCACCTGTT
TAAAAATATAATAATAATAATTAAATCTTTTGCCCCACTGCGGGATGAGC
AGCTGGTGGTTCCCAGCTCACAATAAACCACACTTGAGACTCCCTGGAGA
ATTCGCTTTCTTTTTGCAGCTGGTTCCATGTGGGGCTGTTCAGCCCCTCT
GCAGCTCATAGGCTTTTCTTCACAGCCTCTGCTCCACCTATTGCTGAAAA
GGGGGAAATTTGAGATGGATCCCATTTTGTGAACATCTCCCACCTGTGGG
TAATGCTCAGACCTCTCAGCCCTGTGGGTTTAATTTCTCTTTCTGCAGCT
TAATGGGTTGGGGATGTTCATTACTGCAATAATTAGTGATGGGATAGGGG
AGGCAGGAGAGGATCCAAGCAGGGGAAAGGGGAGGGGAAGGACATACTGT
GTGTGTCTG[illegible]AGCGGCTC
```

FIGURE 10

SUITE 42

COSMIDE.txt

```
AGAATACCATTCCTCCCTATGCCAAAGCAGAACTGAGGGCAAAAATAGTG
GTTATTTAAAAATATATATGTTTTAATTGACTATCAACAGGGCGAATGGC
ACAAAGGTTGCATCACGCTGTGTGGTGGGTTTTGATGCAACTCAAAATTG
CAACTAGGAGTTCCTGTGCTAAGTGCTAAGGAAAAATGAGATGAAAAATG
AGATGAGAAGCCGCCCAGCTGTTTAATTAAAGCAGTTTGGTGACTGTCGT
GCTATGGTGACTGAAGTAAGCAAGCACTGTGCTGCAAATGCCCCCATCTC
TCCTGGAAGTCGAGGATATTTTCCCCTGTGGCCAATAATGACAGAGCATT
TTAAGCCCAAATCTTTATCCAGCCAAATTCCACAATGGAGACACCGATCT
GCAGGGAGATTCCAGATAGCACATTCTGTGTTTCCTTAAATAGGGCTGAT
ATTTCCCTCTGTCCCACATGTGATCCATCTGAGCTCACACAGCCCTTAAA
AATCTGCAAGGATCTTGTTCTGCTGCCTGGCGGTGAGTGTCTTTTTGGGG
CTATTTGGCACCATTTTGGCAACGGGAGTTGGCAACGTCACCCTGAGTTC
TTCCAGAGTTCTATGAAAAGCTTTAAAATCGGGTTTTTGCACTTTTTCCA
CGATCCACCTCTAGGGACCAAGCTGGTATTGGGGGGGGGGGGGGTGTGC
TTTCAGGGGGGTTTGGGTTCTGTTTTGGGGGATATTTGGCATATAAAGGT
GGTTTTCACCTTTGGGATGGGCCTTGGAAAGGAGTGTTTTGTTGGCTGTC
CCGTTGCCTTTCTTCCTACAAAGCCTTTCTTCCTACAGAGGCTGCACCAA
GGTCTCTTTTAGCAGATCACAAAGAGAGGGCGCAAAGAACGAGGTTAGAA
TTCAAGTTTTTAGGGTTGAAATATGGGTAGGATGATTGAGTCCTTCTCCT
TTGTCCGTACCAAGCCTGGAGATACCAATCTGAGATGTCAAACTGCACAA
TGGAGCCTTCAGTGGGATGAACTTCAGGCCAGATGCCCAAGAGAGGTGTT
AAGTTTTGGTTAAAGCCCACATCAGTAGCAATAGAAAGAAATGGGTGATT
CATCCCTTCCAAAACTCAACTTTTGGAAGAAATTAGGGAAGAAATCCCGC
TTCCGTGCTGAACCCTTCTGTATTTTCACCCCAGGGCAAAGAAGGAGGAT
CGCGAGAGATTGGAGACCACAGCACCATGGCCTCTGCTGCTTCCAGAGCA
AAGGAAAAGGGAGAGGGGGGCTCCCACCACCCTATCCCAGAGCATCAGAT
GGGCAATGGATGCAGCAGCTCCGTGGGTCGTGGAGGTGGCACGTGGCAGG
AGCGAGGACGGCTCGGAGATACCGAGGTCATCAGCCACCGAAACCATCTC
AGGAAAGGGAATTTCCACACAAAACTCCATTTGGAGCACCTGGCAGAGAA
GCTGAAGCTTTTGGGGCTGGATGGAGACAGAGGGGAGAAGGAGAAACTCT
GCTCGTGGCGCAAGAGGACATTCCCCTCCAATGGACCACGGGATGATGGA
GGTCCCACTGGAGCCCCCATAAAGGAGTCAGTGCAGGAGGATGTGGTCAG
CCCTGTGTTATTCCCTAAAGCCCTGTTTAATCCTTCATGTCCATGCTGAA
AACTTCTTCTCTGCGAAGTCCAACACATTGCATCTCTTCCCTTCTTTCTC
CCATCACAATATCCTCCCCAAACCCCTTTTTCTTCCTCCAGGAGCAGATT
CACAGCGATCTGGAGAACCTCAAGAAACAAAAGGAGGAGCTCTTAGAACT
CAAAAGGAGTGGGGAGAGGCGATGCCAAGACCTTCTGGTAAGAAGCTGTT
GCCTTCAAGCTGGAAAAACAGAGGTCTTTTTGGGGTCCACGTTGTTGATT
TTCCACAACCTACAGACACGGACGGAGGCTGAGAGGCAGAAAATTGTGTC
AGAATTCCGTCAGCTCCGCCGTTTTCTGAAGGAGAAGGAGATGGTGCTCG
TGGCACGGCTGGGGGAGCTGGACAGGGCTGTGCTGAGGAGGCAGGAGGAG
GAGGAGGCCAAGGTGGAGGGGGACATTTCTCTCCTCGGCATCCTCATCTG
TGAGATGGAGGAGAAACTCAAGCAACCCACACGTGGATTCCTACAGGTTG
GATTCCTACGGGTTGGATTCCTATGGGTTGGATACTCCATTGGACCCTCT
CCCTTCTTGTCCACCTTCTCCAAAGCTGGGGGAGATTGAACCATTTTTTC
CTATCTCTTTCAATTCCAGGATGCCAGAAGCACGCTGAGCAGGTATGTGC
TCCTTCAACCTCATTCAACGGGGTGGAAAGGGTTCCCCATCCCCACACCC
ACGGATTCTAGCACAGAAATGAGAAATGCATGTGATTGAGGCAAGGTTGG
AAGTCCCATGGGGGTCAAAAAGTGCCTCAGTGTAGGAATGGCCCAAGAGA
AAGACCTCGTGGCCATTGGGGCGACCCAAGGGACCGCATTCTGTACGGAG
CAGGTTGGCATCCCCAAACCTGTGACAAAGGGACATTCTGGAGCCAACCA
CCTCAACCTCCATCCCCACATCACCAGAGATCCCCACACTCATCACCACC
AGTCCCAGCACTGATGAGATTTGTGTCCAGGTGGGAGAGGGGCAGAACAC
GAAGGATGACAGAG[illegible]ATC
TCCCAGCAACATAAAATCCTCAGGGAGACGTTGGGGAGATTCCAAGGTAT
```

FIGURE 10

SUITE 43

COSMIDE.txt

TGTGGACCACAGTATTCCTACCACATAGGATTTGCTTTGTACTGAAGGTT
GGGGGGTTTTTTGGTCGTTTGAATAGGAGTTGTATACACTATTGGAAAAC
AATTTGCATTAACTCACACTATCAATCATTCTTAGGCCTAAGAGCATCTG
TTTTTTAGGACCAAATCCCACAGATCCCACATAAAATCCTGCACAGATAT
CCATGATAAACATGGTGGGAACTGAAGCAGGCAGATGTGGGACATGACAT
CCAACCTTCTGTTCATCCCCAGATCTTTTTCTATCTGAGCTGGAGAAGGA
GGAGGGAGCATCTGTAGGAGAAGAGGGAAAAGGTGAGTCCTTAAAGCATT
TTCCTTTTGCTCCATTGGTCATTTTTTTAGCCAAAATACTGCGTCAGAGC
ATCTGGAAAATGATGGTTTTGAGCTCATTTCTGGTTTCCTAAAGGTGATA
TAAAGAAGCTTTCCTATATTTCAGCAAAGGTTTTCTGAGCTGGAAAATAT
GGAGACATCGCTGATCCCAAAGTAGATTTGGGGTGCTGTTCCAGCTTTAG
GGTGATGCTCACCCATTTCTTCTCCATCCCCAACAGCGTTTGTCACCCTG
GACCCCACCACTGCCACTGCAGGGCTCGTCCTGTCCCGGGACCGACGTGG
GGTGAGATGGATGGATATGGGGCACAACATGTCCCCTTGTCCCCAACGCT
TCGATGTCTCCTGCTGTGTGCTGGGCTGTCGAGGCTTCACCTCAGGGTGG
CACTTTTGGGATGTGGAGGTGATGGGTGGTGCCACGTGGGCACTCGGGGT
GGCACGCAGCTCTGTGCCCAGGAAGGGTTGGCTCACTTTCCACCCCGATT
ATGGGATTTGGGCTATGGGATGCTGTAGGAACAGCTTCCGAGCTTTCACA
TCTCCCCCATCC

FIGURE 10

SUITE 44

D12FOR.txt

```
GGGGGGCGATATGGGTGGTGGGACATGAGGGGGCCGGGGGGGGTCGGGTC
TCACCCGCCAGCAGCAGCCGCAGCCCCGCAGCCATTGCTCTCCGCTGCTT
TCGCTTTCGGCTCCGCTGTGGCCCCACCCCCTCCGTCACTTCGTCAATAT
TAATTTTAAATCCCTGAAACCCATTAAAAAAAGGGTCGGAGAGGGAAAAC
TCATTCAGGAACAGTGTTGGAAGAGGGGACATGGGTGGGACAACCCGGCT
TTCCCCACAGGCCGACCTAAACACAGCCACTGCCACCCACCCCGGATCCA
TGGGTGACGTAAGGATGAGGTTCCAGCACATATTGGACCCTTCTGCGTTT
GCATGG
```

FIGURE 10

SUITE 45

E1REV.txt

```
GTGGGGGGCAGCGTCCGCGCTGACCTCGTCTCGCTGTGTTTCAGGGCGCC
CCGTCGCCGCCGCTCCAGGTAACGTCCCGTTCCCATTCCCGTTCCCGTTC
CCGTTCCCGTTCCGCGCTGCGCGGAGCGGCCCCGATCCCGGCGCGGGGCT
CAGCTCTGCCCGTCTCCCCGCAGGGATGCTGAATTAGCTGCTGCCCCGCC
GAGCCGCTGCACCCGCACCCCCCGCTCTCCCGGCCGTCGCCTCGGCTCTC
CCTCGGGCTGCCACCGCGTCCGTTGGAGATGTCGCCACGATGCACGCTTC
GTCCCCATCCTAATAAACGCGCTGACTTTGACCCCGCTGTTCGCTGCCCG
TGAATCATTGGGGACTTTCCGTCGCGTGGGAGGAGGGGAGGGAAGTGAAA
GCTTCGTGGAGAAGTAAACCCAGCACCCTATGGGTCCCACGGGACGTGGA
TTGGTGGGGATGGGGTGGGATTGGACTCTTGGTGGTCATTTCCACCCATA
GGGAGCTCGCGGCCACCCAGTGGTCCTCATATAGACTCCATGGTCACACC
ACTGTCACCTTTTGGTCACCCCATGATCCCTGTGTTACCCTCCGGGGTCC
CTCAGTGGTTACCCCACGTTCCCCCAGAGGCTCCTCCTGTCGCCTTCATC
ATCTCACCCCATTGACCACATACCCCCCTCCCCCTATGGATAACCCAAAG
CCATCACCAGTGGTGTTGGGATGCAAACACGGGGCCCCGGACCTGTCCCT
ACAAGCACAGGGTGGTGACACAGCCCAGACAGTGATGCTGTGTCATTTGT
CACCAGGCAGAGGACACACAGCCACAGCCTGGCTCAACTCGAATAATATT
TTCTTTATTTACATGTTAAAGAATCGAAAGGTTGGAAACATACAGTAAGA
TGAAAACACGGCTCTAAGGGTCTAACAGTGGGGCAGGAGGGTGGGGGGGA
GGAAAAAAAAGAAAAAAGGGAAAGAAAAAACCAAAACAAGTAGAAAAAAA
ATGATACAGTCAACGTAAAAAAGGGGTGGCCCTCCCTCCCCCAGTGGGAA
CATGCGGCGCTGCGTGCCGGGGGGTTTTATGTACAGGGGCCGGGCAGCTC
CAATAAATTAAAACCTCCAAATACAATGAGGGGGGAAGGGGGGGTGCAGA
GCCCCTCGCTGGGTGGTTTCCTTCTTTAAATGCTTTTTTTTTTTTTTTGT
AATTTTTTTTAATTTTTTTTTTTTAATTTTTCTTAAAAACCCCAAACCTT
TTTCTCCCCCCCCCCTTTTTTTTTTTTTTGGAAAAAATCCCACGAGTCAG
GAGGAAAAAAAAAAAAAAAGCCAACCCTAACACAACAAACAGTAAAACCT
GCTGGGGGGCACCGCCGACCCCCCCTTGTCCGACCCCACAGCCCCACACT
GCCCTGGGGACGCTCGGGGGCCTCCGGTCACACCGGGACCCCCAGCTGAG
TCCATGGGGCGTCCCCTGGGCTGCTGGGGGGCTCTCGGTCTGCTCCATGC
CGGCCCGGTCCTGCAGAGCCGCTCGGGATGCTGCCCCATGTGGTGCTGTG
GGGTTTAACCCGAATCCGAGTCGCTGGTGTCCGAGGACGAGGAGCTGGAA
CTGGAGCTGCTGGAGTCGGAGCTGGAGCTGGAGGCGCTGAGCCGTGAAAC
AGCCACCTGCTGTGCTGACTCGGGCTTCTCGTTGGCTGCAATGGACAAC
ACTGCGCTCAGCATCACCACAGATCACACCCCAATCCCACTCCAGACCCC
ACACTCACCCTTTTTTGGGGGTTTCTTGGCTGAGTTGAGCTGCCCGCTGA
CGTCCTGCAGCCGCTTCTCCAGCTCCCGCTTCTTCTCCAGCGCCAGTTCT
TCTTTCGTCTTCCCCACCGGCTTCTTCATGGCTGTGAAATTCAGGTTCAG
CCCCACACCATCCCACCTCCACCCCAGGGCCGCCCCCTGAACGCAGCCCC
CCACTCACTCTCGCTATAGGGTTTGCGGGGTTTCTTCCGCAGGCAGGACA
GCACGTAGCGCTCCAGCTCACGCAGTGTGGAGGGTTTGAGGGTCTCGAAG
TCGATCTCGATCTCCTCGGGGTTGGAATCACGCAGTGAGGGCTCCCGGGA
CTGGATGATGTGCACCACACGGCCCAGCTTCTCCCCGGGCAGTTTGTTGA
TGTCCAGGCTCAACTGCCTCTTCTCATCGTACGTCATCGGTTTGCTCTCC
TCTTCCTCTTCCGAATCGTAGAGCGTGGGCGGAGGCGGCAGCGCCGCTTT
TGCTGCTTTCTTTGAGTTCCTGCAGGAAGCAAAGCACCATCAGGAAAATG
AACCTCAGGAATCACCCCACAGCTGACCATCATCCCCCAAAAAACAGCCT
AGACTCACTTGGAGCTGCCCCCACCGCTCCCCCCGCCGCCACCCTTCTTG
GCTTTGCGGAGCTGTGCCTGACGCGCCCGGCTCTCTTCATCTCCTCCTCG
CCCTTTGTGCTTCTCCGATTTCTTCTTTTTCTTTTTCTCCCGCTTCTTTT
TGGGTTTGGAAACGGGGCCCTGTGAGAGGGCAGCCAGCTGCTCGTGCACG
GCCCGCAGCTGTGGGGGGAGACAGGGGGTGAGGCGGGCATGGGGAGCAGG
CACAGGCAGCAGCACCGGCCCAGCTCCGGCCCTCACCTGCTCCTGCAGCT
CTGCCAGGCGGTTGGCACGTTCCTCTTCCGAGTCAGAGCTCTCCTCGCTG
TCTGATGAGCT[illegible]ATCATC
```

FIGURE 10

SUITE 46

E1REV.txt

```
TTCATCTTCATCATCCTCATCGCTGGAGGATTCCTCGGAGGAGGATTTGG
AGAGGGCTCCAAGCAGTGGGGCAGACACTGAGGGTGGGCTGGCGTCCTGC
GGCTCATCAGGCATCTTGGCGTAGCTGAACTCAAAGACATCCTGAGAGAG
AGGACACAGAGGGGTAAGCTGACTGGGCTGGGGTTACGGGGCTGCTGGG
TGACCCCACCCACCTGCAGCTTGCGGGCCATGGCCACCACATCGTGGTCG
GGAGGGTTGTATTTGTAGCAGTTGGAGAACATTAACCGGACATCAGCGGC
AAACTCCTGTGCGTCATGGTAGTCCCGGTTCTCCATCTTCCGCTGTGGGA
AGGGAAAGGCGTGAGCAGACCTCAAAGCCACCCCCACAAAGCCCCCATGA
GGCTGTGCCAAGGCCCACGGAGTCCCCAAGCGAACCTTGATGGTGCTGAG
GTCCATGGGGTGTTTGATGATCTCGTGGTAATCGTGCAGCCCCAGCGCCG
AGGCATCGACCGGCTTGTAGAAGGGCCATGCGTAGGCAGCGTGCTTCTTG
GAGAGCAGCTCCTTCAGAATCCCATTGCAGTATTTGAGCTGCTCCGACAA
TTTGCCCTTTTTGGAGGTCTGATGCTGCTGGGAATCCGGCAAGTCCTTCT
TGGGGGGTTTGATGGGGCGGCCGCTCTCACGCCGTGCGGGAATTTTGGCC
GCCTTGGCCTCCAGCAGCGTGGCTGACGGGGAGGATTCACCGCTGGTGGC
TATGATGGCGGTGGTGGTAGGGGTGGTGGTGTCTGCTTTCCGCTTCACAC
CCTTTTTCTACCAAAATACAGAAAGGTTGATGAATGGGAGGCCCAGCACA
GCCCACAGAGCCTCCTCCCGTGAGCGAAGAGCTCCCATCTCCCACCTTGG
CCACGGGTTGGGTGGGCGCAGGCGCAGTCAGCACAGCCGGGGCAGTGGAG
TGCAGCGACTTGAGGAGCGGAGCGGAGATGACGGACGGGTGGGGAATGTT
GACAATGGTGGTGGCGATGTCGGGGCTTGGGGTGTACACAGCGGTGTGGG
ACACAGAGGAGACAGCTGGCACTTGCTGAGCCGCTGTGAGACCTGCCAGG
AGCGCTGCGGACAGGCAGAACCCCCATTAGCACCAAGGTACCTTCAGTGC
TCTACCTGAAAGCGCAACCCAAAGAACCCCAGGTACCTGCTGCCCGCGAC
GCTCCCTTCTTGTGGCTGTTTTTGGCCACTGGGACCACGATCTCCTGCTC
TTCTGGTGGCATTTGGGCCACCTTCTGCAGGAAGATCTTCTCCAGGGTTT
GGGCCATCAGCACAATGTCATCTGTGGGCTACAGGGACAACCGAAACGTC
ACAGGATGCAGAGATGGCATCAAAGGCCTCAAAGCATCCATGCTGCAGTC
CTCACCTTGTTATAGATATAGCAGTTTGTGAACATGGTGTTGAAGTCCTG
CATGCACTCAGCTGCCCCCCAGTAGTAGTTGTTCTCCAAGCGCCGTTTGA
TCGTCCCCATGTCCATGGGCTGCTTGATGATCTTGTGGTAATCCTGCATA
GGGGATGGACAGTCAGCGCCGTGTTGGTAACCACACTGCACCCCTCCCAG
CCCCAGAAGCAGTGGTTTGGGGTTTTTAGGAGCTCAACATCCCCCAAAGT
ATCAGGACGTTGACACGCACACAGATCCGCTCTCGCACCATGCATCAAAA
GCAGGGCAAAAGGGTGCAAAGGGATGGAAAAACACCTCCGGGTCTGGTCC
CCGCCCGAGAGTGCCACCGTGCTGCTCTGTAGGGGACCTTCAGGTGCTCT
TGTGGGTTGCCTACGCTATAGGGACAGCCAAAACACTGCTGTCCACAGCA
TGAGGTGCAATGGGGGCCACTAATGCTAAAGTAAGAGCAAACCTATGTGG
AATTTACCTCTGGGCTTTAAATCCTTGGGCGCCACAGGTACACAGGGGGC
TGGCGTTTAATATTGGGGTCACAAGATGTCTTCTACAAATTCATGGATGG
GAATCTGCAAAACGCATTCAGGGCACAAGAGATTAGGTGAGGAAACATCC
GGGTTCCCTCTAGAGCAGCTGCGTCACCTCACCCATACCCGTGCGGTGGC
ACTGGGAGGGGACAGCAGCTCTGAGGACATCAGGTCACCTACTGGGGGGG
CTTCAGAGCCTGTGGAGTTGGGATTATGCCCCTAAGAGAGGGCGAGGCCA
GCACAGCCCAGGCACCTGCAGCTGCATCTCTGTGGTGGAGCCCATAGAGG
GGACAATGCTGTCCCTGTGGCACTCTCAGGCTGGGGACCACGGCTCGGGG
TGGCCCTCAGCACCCAGGGGACAAGTCTGGGGACACACAGCCATGCTGGG
GGACCCACAGGAGGGGACACGTTACCGGCAGACCCAGCTTGACGGCGTCG
ACGGGCTGACGGAAAGGCCAAGCGAACTGGTGCTTCCACAGGGCTTTCAT
CACCACTTTGTGCAGGTACTGCAGCTGGTTGGTGACCCGGCCGGGCTTTT
TGGGGTTCGAGACCTCTGGCGGAGGGGGGTTCGCCTGGGGGGTCTGTAGG
GCCGGCACCGAGGCCATGGTGGGGCTCTCGAAGCCCTCGTAAAGCAGCGA
GGGTTTGCGGATGCGTTTGCCCGGGGTCGATTCCGTCGCCAAACCCATAA
GCCCGGCATTTCCCTCCCCCAGAATCCTGCAAGGGAGCAAAAGACAACAT
CAGCAAGGATGGGGCCAGCGTTCCACCACCAAGGTGCACAAGAACAGCTC
```

FIGURE 10

SUITE 47

E1REV.txt

```
AAAAAAAGGCAAAAAAAGTAATCAAAAAAAGGAAGGTTGGAGCAAACAAA
GAGTCAGTGCAGGGGGTGACATCAGGGCCCAGCAGTTTCACCACCTCGGG
GTACGACAGCCTGCACTACAGCATGACAAGGCAGCACCCAAACACTGTGG
CCCTCAGCTGGATACACAACAGTGGGCTCCAAATGTCTGGGGACGGGGGC
AGAATTATTTAAGTGGGGAAAATGAGGATTTAAGCAGCTGGGAGAGGTGG
GATGTCTGCAGCGTGAGGAGAATTTGTCACCGGGAAAATACGGTGAATGT
CGAGCACTGGGGCTGCTTTCTCAGGCAGCTCCCAGGGTGTTCCCCATCCT
GCCAAGGACGTGGTGGGAATGACAAGGAAGGAAGGTGACAGAAGGACACA
GCGGCCCCAGTAGTGGCGGTACAGGGTGGGAGGACACGGTGAGACCCCTC
AGCATGGTGACAGTGTCCCCGAAAGCAGCTCAGTCAGCAGAGGTGGCAGC
AGGGCCCTAAGGGCCCTTGTGATGCTGACCCCAAGGACCAGGGGTATGAG
GAGTGGATAAATGGGGGTGGCCCAGACAGGATCCATGGGAAAACAGGGCT
GCCAGGTTCCCTGTAGGATCTGTGTCCCTGCATCCCTGACAGAATTCACA
TGGACCACGGGGCTGCCGAGTCCCAACATCCCTGAAGGACCCACAGAAAT
GGGAAGTGGATAAATGGGAACAAGCAGCAGATCAATGGGACTCAGTGACC
CCAAACTCAGAGCTCTGTGACAGAAAAGCCCCATAACTCTGGTGGACATC
CACACTGCACCCTAATCCCTGGGCAATGAAGGGATAGCAGCAGGGAACCA
CTGTGTCCCTGTATCTCTGACCCCAAAGAATCCATGGAGATGGGGAATGG
ATAAATAGGGATGGCTCTGTAGAATCCGGGTCCCATTCCCCTCAAATAAT
CCATGGGAATGGCACTGTTGGATGCATGGCCTTGAGTCCCTGTCCCTAAA
AATCTGTAGGAATGACTCTGTGCTATGCACCTCCCCGTGTCCCTGTTAGG
ATCCATGGGGACAGCAGGCTGCCAGGTCCCCTGTATGATCCACAGCCCTA
AAAGCAGCTTGGTCAACAAATGGGAGGGAACAGCGGGTCCCTAAAGAGCG
CCAGGTCGCCATGTCCCTGTCCCCAAAGGACCCACAGGTACAAGGAACGA
ATAAACAGAGACAAGGAGCACTCAGTGGGATACAACTGATGTCAGGTGCA
GAGCCTTTGAACACAGAAGCCCCATCTCCCCATAGGATTCAGGTCCCCAT
GCCCCTGTTGGAACCATGGGGACAGGGAGGCTGATGGATTCCCTGCAGGA
CTGAGTTCCTGTGTCCCTGACCCCGAAGAATCGATGGGGACAGAGAGTAG
ATAAACAGCGATAGCCCTATAAGATCCAGGTCCCCGCGTCCCTGTCAGGA
TCCGTGGGGACCGTGGGGCTGCCAGGTCCCCACGTCCCCGTCCCCAAGCA
ATCGATCCACGGGGATGAGGAACACATAAACGAGGACAACCGGCATACAA
ACGAGATCCAACCGGCCCCGGGTGGAGCACCGGGACGCGGCAGCCCCATA
CCGCCGTCCCCGCAGCAACGCCATCCCCGGTTCATAACTGCCAACACCCC
ACAGCCCCCCCGGCCCCCATTCCTGCCCCTCATCACCTACTTGCTCTGG
GGATTCACATTCTGCAGCATGCCGGCGGCTGCGTGCCCGGCCCTGGCTCC
CGGCCTTCCTCCTCCACCTCCTCCTCCCGCCGCCGCCTCCTCCGACGTCC
CCCCCACTTTGCCCACCGAGCAGCGCCCGTTAAGGCAGCGGCCCTCGGCC
GGGCATGAGGCGGCGGCTCCGGCCGGGCCCCGCCGCGCGCCCTCACATCA
GCGGAGAAAATGGCGGCGGGGCCTGGATGGAGAGGGGGGACCTTCCTGCT
CTCCGCTGCGCACAGAACCCGCCGCGACGCCGCCGATATAGAGCCGGGAA
AGCCGGTAGGAACCGGATAGATCCTCGGAAGGACGGTGTGAGGCGGATGG
AAGGCGGACAGAGGGCGGATGGAGGCGGATGGTTCAGCGGGAGGGCTCCA
TCTTGGCTCGTAGGCCCCGAAGAGGAATCGGTGCCGGCGGCCGCAGGCAG
GGGTCGCTACGGAGGCCGGGGAGGGTCCGGTGGAGCCGTCCGGGAGCGCG
AAGGCGGGGGCTGGGCCCGCCCGGTGGAGGATGGAGGCGGATTGGGGCCG
CCCCCCAGCGCGCGCCGAGCCCGACCCGCACCGTCCCTTCGTCCCCACGA
AATGGCGCCGCTCGGCCTGCCCCCGGCCGCCCTTATATAGACACCACCTG
GGTGCTGATTGGTGGGTGGACGCGCTGACGTCAGCCACCCGCTTGCACCC
GCCCTGCCGCTGCCTCATTGGACGGCGGTGCTCACCGCGCAGCGCTCCTC
TTGGCCGCCCCGCACGCCACTCACCCGCGCCGCTCCCCCCCCGCCCTTCC
GCCCGGTACTGCGACGGTCATTGGTCGGTGCTGCCATTCCCGGCGCGGCG
ATTGGCCACCACGGATCACGTGAGGGCGGCGCTGTTGGCTGTTGTTGTCG
CGCGCGAAGGTGCAGAGGGAGGGGGAGGGCTAAGGCGGGCGTCGCCATTT
TGTGTGGCGGCGGCCAACGGGCGCGGGCGTCCCGGGGGTTCGGACCCTCC
GCCCAAAGGCTCCTCAGGGGGCTCAGCAGACCCCAGTCAGTCCCTACGGG
```

FIGURE 10

SUITE 48

E1REV.txt

```
GCTCGTGAGGCTCTCCCAGCCGACAGCGGCCATCGGGCAGCGGAGCCGCG
GCGGTCCGCGAGCCGCGGGCTGAGCTGTGGTGAGGTAGTGAGCTGGGTCC
CGGGGATCCTGAAGGGTCCTGAGGTAATCGCGGCCCTCAGCGCGGTCCCG
GGGCCTTCAGTGCCACCCCACGGTGGTACTGGGGCCCTCAGACCGTCCCC
TCCCCCACTGCCACGGCGATCCGGAGGGGGGGGTCCGAGGCCGCCCCGT
GTCTATTCGGAGGTGCTCTGTGCTCTTCTTCCCCACGGCAATTCTGGAGG
GCTCACAGCTACTCCAGAGCAGCCCCATAACCGTCCTGGGGGCCTCACTA
CCACCCTACAGCAACTCAGAGCCTCCCCCCACCCCCCCAAAAAAACAATC
CTGGAATCCCCAAGGCCATCCCACACCAACGCTGAAGGTCTCAAAGCCCC
CCCTCCCCCACACACACCGGTTCTAGGGTCCTCAGAACCACCCCACAGCA
ATCCTGGGACGTTCCACAGCCCCTCCGTAGTAATCTTTTAGTTTCTCAAG
GCCAACCCGTAGCACGGGGGGCCTCCGCTGCCTCCCCTCGTGGCAATCCT
GGGGGGCTCAGTGCCACCTCACAGGAATTTCGGGTCGCTCAGAACCTCTG
CAAAGCAATCCTGGGGTCCTCGAGGCCACCCCACACCGATCTCAGGGTGC
TCAATGCCACCCCACAGCTGCCCCCGGGGCCGTCACAATCACCCCACACC
AATCCTGAGAAACTCAGTGCCACCCCACAGCCAATCCCGGGGTGCCCCAT
TGCCTCTCTAAAGCCTCCACCCCAATCCGGGGGTGTTCAATGCCACCCCA
CAACCCCCCTCAAAGCACTCCTGGATACCCCACGGACACCCCAACGCCCT
AAAACAAATCCCAGGGCGCTCAATGGAACCTCCCGCGCAACCTCGGGCTG
CCCCACGCCCCCTCCAACTCAAGCACGACCCAGAGACCCCCCTTTTCTCC
CAACCCCTCCGGCCCCACACGCCAAAGGCTCTCAAAGACCCCCCCCCAGC
GATCCCGGACCCGAACAGGGCTTTGGGGTCCCCCCCACGGCGCTCCCGGT
GCCGCCCCCCCCCGCCCCGTGACACAGCACTTTGGATCCCCGCGGGCCCT
CCCCGCCGCCGCCCCCGCGCGAACACCCAAACATGGCGCTTTTCGCCCCA
AAAGCGCCGGGCACAAAGCGGCGCCGCCCATTGGTCGTCTGCCCGCCGTC
CTCGCTTCCCATTGGCCCCTTCGACGGCGGAGGGGCGGAACCAGATTTGA
TGGACAGCTCATGCTCACGTGTCCTCCCCCCCCCCCGATTGGGTCTTTTT
GGTTAAAAAAATAAAATAAAATCATAAAAAAAGGGCGAAGTTGCCCCATC
GTCACTCACCTGAGCCGCTCCCACGCAGGGCCACGACCCCCAACCCGATA
TCATCCTCGCGTCGCCCCCTTAAAGCCCCGTTTTTGGGGCAAAAAATCAA
AAAAAACATCCCAGGGCAGAAAAAGGAGCCACGCGCTACGTCAGCTGCAC
CGTGATTGGCCACCCGCCGTCACGTGACGGCCCCGCGCCACTCCGACGGC
CCCATTCATGGAGCCCGGGCGGCTCCGCGGGGTCCTATCGCCGCTCCGGA
GGGGGTGATGGCGCGCATGCGCAGTGCAGGGGGCATGTGGTGGGGGGAGG
GAGGGGTGGGGCTGTGGGGATGCCCGGTGTTGCTGGGGGGCTGCTGTAGG
GTTGCATGGCATTGCGAGGATGCAGCCATGAAGATTCACGGCATTGTAAG
TGTGCATCTGTAGGGGCCCCTGGCATTGCAAGTGTGCACCTATGGGAGTG
CCCGGCATTGCAAGGGTGCACCTCTGGACGCGTTTGTCATTGCAAAGGGT
GCAGCTGTGGTGGTGAATGGCATTGCAAGGGTGTATCTATGGGAGTGTAC
AGCATTGCAAGGGCGCACCTATGGGTGTGCCTGGCATTGCATGCATGCAC
GTGTGGGGATGTATGGCACTGGGGGGGTGCACCAGTGGGGGTGCTTGGGA
TTGCAAGGGTGAGCCTATAGCAGTGCCTGGCATTGCAGGGTTGCACGCAG
GGATGCGTACGGCATTGCAGGGGTGCAGCTGCCGGCATTGCAGAGGGCCG
AACCCGCCCGTACGGTTGTGCAGCGCTTCCAGCTCGGAGGGCGCATTGCA
GTGCGGTGCATTGCAGTGCGAGGAGCCACTGCTGCAGGGTGTACAGTGCA
CGCCCCGAGGATGTCCCCTCGGCTCCAAACCCCAAAACCCCACGCTTATT
ACCCCCCAAAAACATACTTTTACACACAAGACACATTTTTACCATCAAAC
CTCACGCTTTTCCCCCAAAATCCCTCACAAAAACAAAATCCGCGCCGTGA
TGAGACACCCCAGAGATCTACGGAGCCTACTCGTCCCCTGCTTCATTAAT
TAGAGCTGCTTATTAATTGCTTGCGGGTGGCTCAGCGCCTATTACAGCGT
CGGGGCTCCCCGCTAGTTTCTTCTATCTAGTAACAAGTGACGCAAGGTAA
CTGCGGAGCGCGGCCATTGGTTGAGCCGCACGATCATCTCCTGTCACAGC
GCTGGTGTTCCCCGCAGATCTGTTCTGCCTAGCAACCGATGACGCGTAAA
GCCGCGAGGCACGGCCATTGGCTAAACTGGTTGCCGGTAGCAGAGGGATG
GGGGCTGCGAGCGGGCGCGGGGCGCTCGTGGCAGCGCTGCTGGGGGCGGC
```

FIGURE 10

SUITE 49

E1REV.txt

```
CCTGGGGAGCGTCAGAGCCGGTAGGGGACGAGGGCGGGGGGCGGTATGGG
TGGGCACGGGGTAGTGCCAGGGGTGTCCAAGATGTGTGCATGGGGAGTGC
AAGGGGCTGTGCAAGGAGTGAATGATGCACTGGGGCAAGGGGTGGGCATG
CACTGGGGCAAGAAGTTGTGCAAGGGGTGTTTGTGCATTGATGCAAGGGG
AGGATGAGCAGGACTGTGTTTGCATGCATGCAGGGGGTTGTGCATGGTGT
GATTAGTGCATTAGTGCAGCGGGGTTGAGTGTGAGATGTGGAGTGTGTGC
AGTTGTGAAAGGGTTGCCATGCACGAGCTGATGTGCGCTCAGTGAGCGTG
CACGCAGCCTGCAGAGTGGGTACACCTGCAACGAGCATGCATGCAGCAGA
TGTGTCCATGCACAGTGTGTGTGTGTGCCTGGTGTGTCCCCATGTCCCAC
GCCCTGTCTGTGCCTGCAGAGCCATCGCTGCACACTCTGTCTGAGGTGCT
CTTCTGCCAGCCGGACACGCCGTCGCTGGGGCTGTCAGTGGCCTTCGACT
CAGAGCAGCTCTTCTCATTCGATGTCCCCAACTCGCAGTGGCTGCCGCAG
CTCCCCGATGGCCCCTCGTGGCCCGCAGACATCGAGCAGCCCCACGAGCT
GCTGCACGACGCCGCGCTGTGCCGTGAGCTGCTCGATTTGCTCACCAGAA
TCGCCACCGGGCCAAACCCAATGCCTGAAGCCAAGGGTGGGTGCTGCTGT
CCCCGCTATGACCCCACTGATGGGTCCCCAGCCGTGTGTTCCCAGTGATG
CTGACCCCAATGGACATCCCCAGTTGATGCATCCCCATTGATGCATCCCC
CACAGACATCCCCATTGATGCTGTCCCCATTGATGTGTTCTCAGTGGATA
TCCCCAATTGATCCTGTTCCCAATGATGCTGTCCCCAATGGACATCCCCA
TTGATGCTGTCCTTGTTGAAGTTGTCTCGATTGATGCATTCCCATTGATG
TGTTCCCAATGGACATCCCCAGCTGATGCTGTTCCCACTGATCCTGTCCC
CATTGATGCATCCCCAATTGGTTTATTCCCCATTGATTTATTCCCCATGG
ATGTCCCCACTGATGCTATCCCCAGTAATGCTGTCCCCACTGATGCTGTC
CCCAATGATCCTGTCCCCAGTGATGTGTGTTCCTAATGGACATCCCAACT
GATGCTATCCCCAACGATGTGTCCTCACTGATGTGTCCCCAGTCCATGTG
GTTCCCAGTGATGTGTCCCCAACAATATGACCTCACTGATGTCTCCCCAG
TTGATGCAATCCCCAATGATGCATCCCCAACAATGCATTCCCAATGATAT
TTCCTCAATATGATGCTGTCCCCAATGATGCATTCCCCATTAACGCACTC
CCACCGACGCATTCCCACCGATGTGTCCCCACTGATGCGTCCCCACTGAT
GTGTCCCCACTGATGTCCCCCCCCACAGGCATCCCGGTGGCCGACGTCTT
CCTGCAGCAGCCTCTGCAGCTCGGCTACCCCAACACTCTGATCTGTATGG
TGGGCAACATCTTCCCCCCAGCCATCACTATCAGCTGGCAGCGGGATGGC
ATCCCCGTCACCGATGGCGTCACCCACCTCACCTACACCCCCACCGAGGA
CCTGGGCTTCATGCGCTTCTCCTACCTGGCGGTGACACCGCACTCTGGTG
ACATCTATGCCTGCATTGTCACCCGCGAGAGGGACAACATCTCTGTGGTG
GCTTACTGGGGTGAGTGGGGATGTGGGGGTCATGCTTTGTGTCCCCGCAG
CGGTGGCTGATGGGGGCGGGTGGTGGGAGCAATGCTTTGTGTCCCTGCAG
TGCCACAGGACCCCATCCCTTCGGACGTGTTGGCCACGGCGGTGTGCGGC
GCAGTGACGGCGCTGGGCATCCTGCTGGCACTGCTGGGTTTGGGGCTGCT
GCTGTCCGCCCGCCGGCGCAGTATGTGGGGACAATGGAGACAGCAGGGAC
ACCCGCCCCGTACTCACTGATGTCCCCCATAAGTTGATCCCTCGGTGTGG
GAACGGTGATGGTGATGTAATTAAAGCCCTTCATTTGCAGCGCGGTGTCC
TTGTTTGTCCCCACTCCGGGAAGGGTGGCAATTAATGGGGTTGGGCATTG
TCCCCATGGCCCCAGGTGGCAAAGTCTGATCCCATTGCACCGCCCATGGG
GTGACGTGAGGAGGAGGAGGAGGAGGAGGAGAAGGAGTAGGAGGAGGTGA
AGGTGGCACGGAGGGGATGAAGGCAGCAGTGCTCCTGATGGGGCCAAGGG
GTTTCAGGGTGCTGGGGGCGATGGGGCTGGTGCTGAGCTGCGGACAGCA
GGTAGGATGTGGGGAAGTGTGGGGTTTTTGGGGTGAAGCATGGGGGTTTT
AGGGTGCAACATGGGCTTTCTGGGGTGCAACATGTGGGTTTGGGGGTGCA
GCATGGGGGTTTTAGGGATGCAGTGTGAGTTTTTAGGGTGCAAAATGGAG
TTTTTGGGGTGCAACGTGGGTTTGGGGGTGCAGTATAAGTTTTTAGGGTG
CAACATGGGGTTTTATGGTACAGCGGGGGCTTTGGAGTGCAGCATGGGGT
GCTGCATGTATGCATAGTGCACAACATGGGGTTCTTGGTGTGCAGTGTGA
GTTTTTAGGGTACAGAGT[illegible]
GTGCAGAATGAATTATTAGGGTACAACATGGGGTTTTAGGGTGCGGCACA
```

FIGURE 10

SUITE 50

E1REV.txt

```
GGGCTTTGGGGCACAGCCCCAGTGCTGTGCCCTCCCCATGCCCCCAACGC
AGGCGCCTTCGTGGTGCACATGGCCAGCTCCTGCCCACTGCTGGCCAATG
GCTCCCTGGGCAGCTTCGACCTCACCATGGCCTTCAACAAGAACCCTCTG
CTGTGCTACGACCCCGACGTCCACCGCTTCTACCCTTGCGATTGGGGGCT
GCTGCACACCGTTGCCACTTTGCTCGCCGCCATCCTAAATGATGATACCA
CATGGGTGCAGCGTGCAGAGGCACGCAGGCAGGCGTGCACTGAGCTGGCT
GCACAGTTCTGGACACACACAGCACTGCGCAGGAGTGAGCACCGCTGCAT
GCAAGTGGAGCATTGCAAACACGGGACGTTGCATGGGGGTGTTGCATGGG
GGTGTTGCAATGGGGTGATGCACAGCCGGTCATTGCATGAGACGCTGCAC
GGGGATGTTGCAAAGGGAACTGCATGGGGACATCGCACAGCAGGTTGAAT
GGGATGTTGCATGGGGACTTTGCAAGGGAACTTTGCACAGAGCATTGCAG
GGGATCCACGCAAGGAATTTGCATAGGGAATGCACAGAGATGTTGCCTGG
GAATGCTGCATGGGGTCATTGCATGAGGAACTGAGAGAGACATTGCACAA
GGAAATGCAAAGGGGCATCACTAGGGGACATGGCATGGGGCATTCTAGGG
AGCATTGCATGGGGACATTGCAAAGGGAATGCAAAGGGACATTGCATGGG
GACATTGCAAACAAATTGAGTGGGAGATTGCACCGGGATGTTGCATGGGG
ACATTGCATGGAATGTCCCACCAACCACCCTGCAGGGTGACACTGGGACC
ATCCCCAGCTCTGACCATCCCCCCTTTGCTGCAGCACCACCCCAGGTCCG
CATCGTCCCCATCCCCATCTCCAACGACCCCGACACCGTCCACCTCATCT
GCCATGTTTGGGGCTTCTACCCACCCGCAGTGACCATCCAGTGGCTGCAC
AACGGCCTCGTGGTGGCCTCAGGTGACACCAAACTGCTGCCCAACGGGGA
CTGGACCTACAGGACACAGGTGGCCCTGAGGGCCAGCACTGCAGCAGGGA
GCACCTACACATGCTCAGTGTGGCACTCCAGCCTGGAGCAGCCGCTGCAG
GAGGACTGGAGTGAGTTTGGGGATGGGGATGTGGCACCCACACCCCACAG
TCCCCCACGGCTCATTGTGCCCACGCTGTCCCCACAGGTCCCAATTTGTC
CCCGGCGATGATGGTGAAGGTGGCAGTGGCGGCCATGGCGCTGACGTTGG
GGTTGGTGGCACTCAGCGCCGGGGTTTTCAGCTTCTGTCAGCGGCCACGG
GGTGAGGGATGGGGATGTGGTGCTGGGGACATGTGTGACACCGAGGGTCT
GGTGTCCAGTGTGGGGTGTACCTCCTCATTCATCATCTTCTGTGTGGCAG
CTCCTGGCGCTGGTCCCAGTCCCCGTCCTGATGCGGGTTCTCACTCCAAT
CCTGGTCCCCAAAATGATCCCGGTCCAAGTTCTGGTCCCCATCCCAGTCC
TGGTCCCCATTCTGGTCTTGGTCCTGGTCCTGGTTCTGCTCCTGGTCCCT
ATCCCTGACTCTGGTCCCGGTCCCCATCCCGATGCCAGTCCCAGTCCTGG
TCCCCATCCTGGTCCTGCTCCTTGGTTTGGGGACCTCAATGACTGGAACT
CCCATGTCCCAACATGGGGACCCACAGTTTGGGGTGAGGGGCTCTCACCC
CCCAATAAAACCATCTGCAGCCCCAACCTCGCTCCAATTCTTCGTTCCCA
CGTTGGGTGGGTCGGGCTCCCAGTGCTCCCAGTGCTCCCAGCCGTCTATG
TCCCGTAAGCGTCGGCTCCACTGCATTCTGCTCCGGAAACAGATGACGCT
ACCACGGCGCCGCCTCTGATTGGCTGCTCCGTGCCCTCTCTCCGTCCCAC
GTCCGTGAAGGGGGGGATGTGGGGTGGAGGGAGCTGAGGGGCCGCCCCCT
TCCCCCCCCCGCTCCCCCCTCCGCGATGTTGGTGCTATTGGGGCTGCTGC
TGGGAGCGCGGGGGGCAGGTGGGGGTTTGGGGTTGGGGTGTTTGGGGGGT
CTCTGCCTAATGAAACTCTGGGGGGGGGGGACGTGGGGGTCTCTGCTTTA
TGGGACTGTGTGGGCGGGCTTGAAGGGGCTCTGCTTTACGGCGCTGGGTG
TGGGTTCTGGGAAGACTGTGCTCTATGGGATCATGGTAGGGGCTTGGGGG
GGCTCTGCTTAATGGCACTGTGTGGAGGGACATTGGGGGTCTCAGCCTTA
TAGGACGTTGGGGATGATTTGTGGGGGTCTCAGCCTTTGCAATATTGAGG
ACACTCTGGGTGGTGGTCTGAGCCCTTAGGGCCCCCAGGGAGGGCTTTAG
GGTGGGCTCAGCCTTTTGGGATACTGGGGTCCTTTTGAGGGGAGGGTCTC
AACTTTATGGGATGTTGCAAAGAGTTTGGAGGGGGTCTCAGCTCTGAGGG
ATATTGGGGACAATTCGGGGGATCTCAGCCCTTTGGAACTCAATGGAGGA
TTTTGGAGTGATGCTGAGGACTCAGCCTTTTGGGTTGCTGGGTATGATTT
GGGGATGCTCAGCCTTATGGAATGGTGGGGACACTTTGTGGGGAGCTCAG
CTCTGTGGGATATTGGGGCCACTTTGGGGGAGTCTCAACCTTTAGGACTC
CCAGGGAGGG[illegible]TCAGCTC
```

FIGURE 10

SUITE 51

E1REV.txt

```
GATGTTATGTCCCCATGGGGACCTCTGGGGGCTCCAAATGGGGATGAGGT
CGCTGCCAGCACTGCCATCTCCCCTCTGTCCCCCCAATGCAGGTGCCTTC
ATGGTGCATGTGGCCAACTCCTGCTCACTGGCAGCCAATGGCTCTCTGCG
GGGCTTCGACCTCACCGTGGCCTTCAACAAGAACCCTCTGGTGTGCTACG
ACCCCGATGGCCACCTCTTCAACGCCTGCGACTGGGGGCTGCTGCACGGC
GTGGCTGGACAGATTGCCATTGCCCTCAACAATGACAGCACCTGGGTGCA
GCGTGCAGAGGCACGGAGACGGGCGTGCAGCAAACTGGCTGCACAGTTCT
GGGCACAGACGGCGCTGCGCAGGAGTGAGCATTGCAAATGGGGCTGTTGC
ACGGGGCGTTGCGTGGGGATGATGTTGCATGGGGCATTGCATGGAGATGA
TGTTGCATGGGGTGTTGCATGGGGACATTGCATGGGGCATTGCATGAAGA
TGGTGCTGCATAGGGCGTCGCATGGGGATGTTGCATGAAGATGTGTAGCA
ATGATGCATGGGGCATTCCATGGGGACGCTGCATGAGGGTGTTGTTTAGC
AATGATGCATGGGGTGCTGCATGGGGATGTTGCATGGAGATATTGCATGG
GGCATTGCATGGGGTTGATCCATGCAGCGTTACATGGGGTTCTCAAGCAG
GGGGATGTTGCATGGAAAAGTTGCATGGAAAATTGCACAGAGGTGTTGCA
AAGCATATGCATGGGGATGTTGTATGGAGGATTGGACGGTGGCTTTGAAG
AACATTCTGCATGGGGCATTGCTTAAGGGTCCCAAGCATGGGGATGCTGC
AAGGAAATGCTGCTGCTTGGTGGCCTTGCAGAGTGTGTTGCATGGAGTTT
GCTTCAAGGAGATGTTGCATGGCATATCATCTGCAGTTTTGCAGAGCACA
TTGCATTGCACATTGCACACTGCACAGAGCAGTGCACTGGGCATCTCCCA
GCGTGTGGCACAACGCTGTTGCAAAGGACATCCCACGAGGTGTTGCAGCA
AACAATGCGCAGAGCTTGCACAGAACGTGGGATATCCCATGGGGATGTGG
CACAGAGCATTGCGTGGGGAATCCTACAGGGAAGTGAGATGGGGAAGTTG
CACAGAGCGTTGCAAGGGGTATTGCACAGAGGGAACTTGCAGAGAATGGG
GCAGGAACCGTCCCCATCCCCTGCTGCTCACCATCCCTGTCCCCACTCCA
GCTCAGCCCCAGGTCCGCATCGTCCCCGCACAGACAGGGAACCCCAGCGT
GCCCATCCGCCTCACCTGCCACGTGTGGGGCTTCTACCCCCCCGAGGTGA
CCATCATCTGGCTGCACAATGGGGACATCGTGGACCTGGAGACCACTCA
CCCATGTTTGCCATCCCCAATGGGAACTGGACCTACCAGACACAGGTGGC
CCTCTCGGTGGCCCCAGAGGTGGGGGACACCTACACGTGCTCGGTGCAGC
ATGCTAGCTTGGAGGAGCCCCTCCTGGAGGACTGGCGTGAGTTGGGATCA
AGGGGGTGACACAGGGACAGCGGTGTCCCTGCTGTGTCACTGCTGGCTGT
GTCCCTGCAGGTCCTGGGCTGACGCTGGAGGTGACGCTGATGGTGGCTGT
GGCCACTGTAGTGATGGTGTTGGGGCTCAGCTTGCTCTTCATTGGTGTCT
ACTGCTGGCGGGCCCAACCCCCTGCCCCAGGTGGGTGCTTGAGAGGGACC
CTATGGGGCTCCATGGACCTCTAAGGGGTCTCTGTCTGGTTCCTATGGGT
CTCTGGGTTGCTGTGAATCTTTCTTTTCTCTGTGGGTCCGTCTGGGGTAT
CTGTTGATCCCTATGGGTTGCTGTGGGGCCTCTGTGGGTCTCTATGGGTC
CTTCTGTTGGCCTCTGTGAGGTCTCTATTTGTCTCTATGCATCCCTTTGG
ATCTCTATGGGGTCTCTGCGGGTCATTACGTGTCTCTATGGGATGTGACC
ATTTTTGACAAGAACCCCACTCACCCCTCCTATTCCCCCAACAGGTTACG
CCCCGCTTCCCGGTCACAACTACCCTTCAGGTAACAGTGTCCCCAAACTG
TCCCTGTCCCCATTGCCATCAATGAGGGCTGAGTGACCCCATCTCTCACC
CCATGTCCCTGCAGGCAGCATCTGATGGACACCTTCTGTCACCAACTGTC
CCTGCGTGTCCCCATCCCTGACTCTGCGCCGTGGTGCTGACATTAAAGAC
ACTCTGCAGCCTCTGTTGGTGTCTCTGTGGGCTTTTGGGGTGGGGTGGTG
TCACCGGGGAGAGGTTGGGTTGGGGTCATTGCATCCATGATGGTGATGGT
GATTGACATTGTGCACAGGGAGATGTCCAGGCGCCTGTGGGGTCTGTGTT
TTAGGGCCAGTTCTGCTCAGTGCCTCCGTAAGTGATCTGGATAGGTCGTC
AGTCATCCTAATTAAGGAGGGGACAACAGTGAATGGGGAGGAGCCGATGA
CTCAGGCTGGGAGTGGTGATCCCAGAGGTTTCCTCTGCTGTCAGTGACTC
CGTGCTTTCGCTTTCGCTTCACAACCTGAGGGAGCGCATTCTGCCTGGCG
CCCGATGACGTCACATAAACCCCCGACTGCCATTGGCGGAGAGGCGACGG
AGGAGCCAATGGGGGCGCGGGGCGGGGCGGAGGAGTAGGAAAAGCTGAAG
GAGCTGCGCTGGGTGCGGCGGACTTGAGAGTGCAGCGGTGTGAGGCGATG
```

FIGURE 10

SUITE 52

E1REV.txt

```
GGGCCGTGCGGGGCGCTGGGCCTGGGGCTGCTGCTCGCCGCCGTGTGCGG
GGCGGCGGCCGGTGAGTGCGGCCGGACCGGGACCCCTCCCCGCCCGTAAC
CCCACCCCGGGGCTGTGCCCGTGGGATCCTCAGACCCCCACCCGCGGCTC
ACGGCCTCGCTGCGCTCCGCCCCCGCAGAGCTCCATTCCCTGCGGTACGT
CCATACGGCGATGACGGATCCCGGCCCCGGGCTGCCGTGGTTCGTGGACG
TGGGGTACGTGGACGGGGAACTCTTCGTGCACTACAACAGCACCGCGCGG
AGGTACGTGCCCCGCACCGAGTGGATGGCGGCCAACACGGACCAGCAGTA
CTGGGATGGACAGACGCAGATCGGACAGGGCAATGAGCGGAGTGTGGAAG
TGAGCTTGAACACACTGCAGGAACGATACAACCAGACCGGCGGTGAGCAC
GGCCGGGGCCGCGGCTCCGTGGGTGTGGGATGGGCTCCATGGCGCAGTGC
CGCCCACACCCCCCAGGCCTGGCCCTGCCCGGCGGCACCGTCCCGGGGCT
GCCCGTCACAGCCCCACCGCGCTCGGGGTGCCGCGTCCCGGGGGGACCCC
AACCCATCCCCGCTGCAGTGGGAGCCCCGGAGCCGGAGGGGCCCCTCACC
CCCTGCCCGGCTGTGTTTCAGGGTCTCACACGGTGCAGCTGATGTACGGC
TGTGACATCCTCGAGGATGGCACCATCCGGGGGTATCATCAGACAGCCTA
CGATGGGAGAGACTTCATTGCCTTCGACAAAGGCACGATGACGTTCACTG
CGGCAGTTCCAGAGGCAGTTCCCACCAAGAGGAAATGGGAGGAAGGAGGT
GTTGCTGAGAGGTGGAAGAGTTACCTGGAGGAAACCTGCGTGGAGGGGCT
GCGGAGATATGTGGAATACGGGAAGGCTGAGCTGGGCAGGAGAGGTGAGC
GGGGTCGGGGTGGGGGGGGGGGGGGCGGACGCAGTGTGGGGCTGGACGT
GGGGCGGGGGCTCATCGTGGGGAGCTCAGCCCGGCCCTCACTGCCGCCCA
CCCACAGAGCGGCCTGAGGTGCGAGTGTGGGGGAAGGAGGCTGACGGGAT
CCTGACCTTGTCCTGCCGCGCTCACGGCTTCTACCCGCGGCCCATCGCCG
TCAGCTGGCTGAAGGACGGCGCGGTGCGGGGCCAGGACGCCCAGTCGGGG
GGCATCGTGCCCAACGGCGACGGCACCTACCACACCTGGGTCACCATCGA
TGCGCAGCCGGGGGACGGGGACAAGTACCAGTGCCGCGTGGAGCACGCCA
GCCTGCCCCAGCCCGGCCTCTACTCGTGGGGTGAGTGAGGGGATGTGGGG
CTGGGGGGCTGCGGGCTGCCCCTTCCCCTGCTGATGGCCCCGCTCTCCCC
CAGAGCCGCCACAGCCCAACCTGGTGCCCATCGTGGCGGGGGTGGCCGTC
GCCATTGTGGCCATCGCCATCGTGGTTGGTGTTGGATTCATCATCTACAG
ACGCCACGCAGGTAAAAGCAGAGGGGTGCAGGCGGGCAGTGGGGGCTGTA
GGGGGATCTGGGTCCCCCTTGGGAGCCCCCAACCTGGCTGTGATGTGAAC
CTGTGATGAAGCATCTCTCTGTCTGCAGGGAAGAAGGGGAAGGGCTACAA
CATCGCGCCCGGTGAGTGATGAGGGCAGCGCTGTCCCCCACCTCTGCCCA
GTGCCAGGGTGGTCCTGGGGTCCCTGCTTTCTCCCAAGGTACCCATTCCT
GGTGCTTGGGGCTGCTCCATGCCCCATAGGGAGCACAGGGCTGGATCTCA
CAGCTGTTCCTCCCTTATAGACAGGGAAGGTGGATCCAGCAGCTCGAGCA
CAGGTGCGGTGTGGGGCTGTGGGTTGGGAGGGGTCCGTGTGCTCTCTGTG
GTACTGCCCAGGGCTGGGCTATGCTGGGGCTCTGCGGGGAGACCCCCGGA
GCAGAGGGTTGGGATGTGAACCTGGCCCCGTGGGACATCATCCCTTCTCA
TCCCCACAGGGAGCAACCCCGCCATCTGAGTGCTGTGCTTCAGCCTGCAA
GGAGCCAACAGTCCACACCAGCATTTGGGGTCGGTGATGGACACAGCCCC
ATCCTCCTGACCTCTCACATCTCATTCTGCTTCCTATGCTGACTGTTATG
CTTTGCCTGCACTGCTTCCTGTGAAATAAAATGATGGCCATTCTGTGCT
CAGCTTGCCTGCATTCTGCACTGTGCTGTGGTTGGGGATGGGGTGGGTGA
GAGGACCGTGTCCCAGTTTGGCTGCTCAGGGTGCAGATGTGGCCCTGTGC
TGAGTACCCACAGCCCTCCCCCCCTATCTGCCTGCTGCTCACTCCCCCTT
CTGTACCCCCATCCCTTCTCACCTCTCCTCTGTGACCCCATGCTGGTGGT
TGCTTGCTCCCTGTCCTGGCAGAACTCTCATTTTCCCAATGGCATCCCTG
GGTGTTGGGATGTGGTCTCCTTGGTCCTCCCCCCAGCAGTCACTGCACAT
ATCCACCCCACTTCCCCCCCAGGTTGTTGTCCCACAGCACTCCTATTTCC
CTCTCCCCCCCCCCCCCCCCCCCCCCGCCCATCCAGCTGCCTCTGCAATC
CTCACCCTTGCCCACACACAACTTTGCGCACTCCACCTCCCTCATCCCGC
CCTTCCCCCAGCTCTCCTGTCCCTGCTGGCCCCCCTCCCCCCCCCCCATT
GTACCCTA[illegible]CAGCCGTCT
```

FIGURE 10
SUITE 53

E1REV.txt

```
CCTGGTTTATTTCCCCCCGATTTGTTGTTGTTGGGGGCTCCGCTCTTCAC
CCTGGGGGGAAGGGGCTCTGGGGGTCCCTCATTCTCCCTGCACTTCTTAC
AGCACCGGGACTCCCGCGCTGAGATCCCATCACACCCGGGTACAAACATG
CGGCTTTATTCCCAGTTCTGTGTCCCACCCCCGGCCCTGGTGGCACTCAG
TGGCACCGCAGTCCATGCAGTGGCCGTTGTGTGTCGTACAGCAGCGGTAC
CGCAGCGCGCCCGGCTCGGCATCCATGTGCCCACGGCACAGCTCTTGTGG
TCCCTTGTCGCTGCCCCGGTGTCCCCACCTCCACCCTCAGTGTCCCCAAC
GCGCAGTGTCCCCATCCCACATCTCACCACCCCCTGCCCTCCCCATCCAT
AACTCCCGCTATCCCTCTGTCCCCCTCCCCCGGTGCTCCCTGTTGTCCCC
AGTCCCGCAGAAGGCTGCCGGGGCGCAGCACCTCGTGGGGGGGTCCCTCC
TGCCGCACCTCTCCCCCCTCCAGCACCACCACCCGCTCTGCCCGCGCCGC
CAGGGCTGCCCGCCCCGTCACCATCAGCACTGCACGCCCCGACCCTTTGG
CTGCGAGGATCTCCTGCTCCACCTGTGGGAGGAGAAACGGTCAGGGGGAT
GTCCTCAGCCACTGCCAGGGACCGAGGGACACCAGGAGTGGAGATAAGGG
GACACCAGAACAGGGGACCATGGGGACCTAGGCGTGCAATCTGAGGGAAC
ACAGGGCTCAGGGGGATGTGGGGACACGGGGACGTGGGGGACATCCCACC
TGCTGCTGGCTCTCAGTGTCCAGGGCGCTGGTGTGCTCGTCGAGTATGAG
GATGCGGGGGTCCCGCAGCAGCGCACGGGCAATGGCCACCGCCTGCCGCT
GCCCCCCGGAGAGCTGTCCTCCCAACTCGCCCACCTCTGCGGGGACAGCG
GGGTCAGGCTGGGAGGGGACCATGGAGGGGACCCGGAACAGAGAGGGGAC
AGCTTACCTGTGTCGTAGCCTTGGGGCAGGCGAGTGATGAAGTCGTGAGC
ACCCACCTGGCGGGCGGCCGCTGTCACCTGCGCCCGGCTGCAGCCCCCCA
ACCCATAGGAGATGTTGGCGTGGAGTGAGCGGGCAAAGAGCAGCGGCTCC
TGGGGGACGACGGCCACCTGCAGTGGGGGGGACAGCTGGGGACATGGGCA
CGTGGCAGTGGAGGCGGTGGGGATGGCTGGGGATGTGTCAGGGACATCTG
GGGACATGGTGGGATGGTTGGGGACACAAGGATGGTTGGGGACTTGGCCG
GGACACTGCAGGGGACACAGTGGTGATATGGCAGAGACATCAGGGTGTGT
GGTGATGGCTGGGGACCCAGATATCTGGTGACTCAATGAGGATGGCTGCT
GATATGCAAGAACACAGGGGGACAACCAGGAGCCATGGGGACATGTGGCT
GCTCACCTGGCGGCACAGGTAGGAGTGCTGGTAGGCGGGGAGGGGGTGGC
CATCCAGCAGCAGGCGTCCGGCCGTGGGCTGGTGCAGGCGGGACACGAGG
GCCACCAGAGTGCTCTTCCCTGCGCCCGGGGGTCCCAGCAGTGCCAGCAC
CTCCCCGGGGCGCAGCTCCAGTGATACGCCCTGGGGACACGGATGTCACA
CCCATGGTGTCCCTGTACCCACACCTCCATAGTCCCACGGCCTTCCTGCT
GTGTCCTTCTGTCCCTGTTCCCCCCCGACCCTTTGTTTTGTTCCCACACC
TTTGGTACCACATCTACATTCCCATGCCCTCCCCACCATGTCTCTGTGTC
ACTCATCATGTCCCAGTGCCACAAACCCACCATGTGCCATGTCCCCGCGC
CCTCAATACCATGATCTCATGTCCCTCTCCAGTGTCCCCATACCACCCCC
TCCATGTATCTCCTTGTTTCATATCCTCACACCCTGTCCATCACATCCAT
GTCCCTGAATCACCCCACTGTGCTCCCACACCTGTCACGCTGTCCCACCA
CACCCCCGTGTCCCCTGGCTGTGTCTCTGTGCCCACCTTGAGGACGGGTT
CCTGGCGCCCAGGGTAGGAGAACCAGACATCCTCCAGCTGAAGGTGGCCC
TGCAGGTCAGCGGGTGCCATTGTCCCTGAGGGTGCGACCTGTGGCTCCCG
GTCCAGGAACTCAAAGATCTTCTCCGAAGAGCCCACAGCCTTCATCAGTG
TGGGGAAGTAGTCGAGCAGGACCTGGGGACAGCGTAGTGACGTGGCCAGG
AGGGCAAGGGCATGTGGCATGGTGACATGGGGACGCAGAGGACACAGTGG
GATTGGCATAGGGACAGGACGGGGTAGGTATGGGGACAGAGGAGGTGACA
CAGGGATGTGGCAGGGGTCACAGAGGGTTAGACGTGGGGACACAGGGACA
TGGATGGGCATGGGGACACACTGCGATTGGCCTGGAGACACAGCAGGGAG
GATGTAGGAACACAGGGACACTGTGACACACTGTGACTGTGGCAGGGAGA
CATGGGGACATGCGGATATGGGCATCCTCTCAGGCTCACCTCCAGGACAT
CAGTGAACTGTATCTGGTAGAGGAGGAAGGTGACGAGGTCCCCAGTGCTG
ACGGTCCCCGCGGCCACCAGCTGCCCCCCATAGTAGAGGATCCCCATCTT
CAGGGCCAGGGCTGAGAACTGAGGATGCCATGAGGTCACCAGGGGACACC
TCCCCCTGGGACTCTGAGTCCCCAGCACCCACTCTGTCACCTTCCTGTTCT
```

FIGURE 10

SUITE 54

E1REV.txt

```
GTCAATGTCCCCCCTGTCCCAGTGTCCCACAGCTGTGCTATCTCTGTGCT
ATGTCCCCTCATGCCATCATGTTCCCAGTGTCCTGGAGCCCCCATGCCGC
CCCATTCCCACGTCACTGCATCCTCCTGCCCCAGAGCCCCTGAACTGTTG
TGCCTGCTACATCCTGATGTCCCCATGCCATCAAATCTATGTCCCACAGT
CCCCATGCCATCATATTCCCATGACCTGCCATCTCCACACCATTATGGCC
TCCAGCCCGTTGGCATTCTGTCCCCATCTCCTGACATCTCAATTACATCA
CGTCTCCACATCTCCCAGCCCTATCCCACCATGTCCCCATGCCCCCCAGT
CCTATCCTATCATGTCCCCACATCCCCCAGCCCCATCCCATCACGTCCCC
ATGCTATTGAGCCACCCCATCCCATACACCACTGGTCCAGAGAGAGGCAG
TGTAGAGGGCCACATCCTTCTTCTCCAGGCGGTGGCTCTGCTGCAGGCGC
TGCCGGTAGTGTGCAGCCGCCCCATCCTCATTGGCAAAGCTTCGCACAGT
GGCCATGGCCTGGAAGGTCTCCACTGCCACCTCGCTGGCCCGGGCCTGCG
CCTTCTGCATCTGTGGTGCCAGGGCCTGGGGACAGCAGTGTCATTGCAGG
GCGGGTGGGAAGGGAATGGGGGCTGGGGAGGGGACAGTGCATGTATGGAG
GGAACAAAGAACACGTGGAGGGGATGGAGGGGACATAAAGGGGACGGTGG
GCATGTGGAGGTGACAGTGGGGGCATGCAGAGAACAGAACCCATGTGGAA
GGGATAATGGTCACACATAGGGAATAATGAGCACATGGCACGGATGGTGG
ACGCATGGAAGGGGCATGGGGCACGTGGAGGGACAGCGGTCACACAGAGG
GGACAACAGCAGGAGGATGGTGGGTACATGGAGGGGACAGTGGGCACATG
GATAGGGCAATGAGTACATGGTGGTGACACTGGGCACATGGAGGGGACCA
GAGGCACATGGAGGGGACCAAAGGCACATGGAGGTGCAGACAGCAGCCCA
TACCTGCCGGAAGTGCCCCACAGCCCTGGGCAGTGCCAGCAGCAGTGGCA
GCGCCAGCGCGGTGAGCAGCGCCATGCGCGGGGACAGCCAGGCCATGGTG
GCGAAGAGGCAGAGGCCACGTGCCAGATACCACAGCAGGAGGCTCAGCGC
CTCACCCAGCGCCTCGCGCACGTCCTCCGCATCCCGCGTCACCCGCATGG
CCACATCCCCTGCCGGGTGACAGCGCCGTCAGTGCCACCCCTGTCCCTTA
TCCCCGTGTCCCCTCCCAGCCCGGTGCCCCTCACCGGCCCCGTCGGCGCG
CAGCTCGGTGATGCTCTGCCGCAGGACGGCGGCGAAGACGCGGCGCTGGA
GGCGGCTCTGCGTGCGGCTCAGTGTCCCCACGAAGGTCACATCACACACC
AGCTCAGTGACAGCGCTGTGACGGCAGTGGGGTGTCAGGGGGTCCCGCGC
TGCCCCCTGCCCGCACCGCGTCCCCCCTATGCCAGTACCTGCTGAGGCCC
AGCAGCACCATGGGCAGGATGGCTGCCAGCTCATCCTCGCGGGCCACCCA
GTCGCTGGCTCGCCCCATGTAGTAGGGCACGGCCATCTCGCCTGTCACCA
CAGCAGGGTCAGGGCATGGGGGACCCCCCCGAGGAATGGTGCCCCAGGAG
TTCTGTGCTGCACCCCCAGTTTGGTGCTGCACCCCCAAAGCTCAGAGGTG
AACCTCCGAAGCTCATTGTTGCCCTCCAGTTGGCTGCAGCCCCCCACCCC
ACCGCAAACCCATCTTCATTCCCATTCAATCACCGCCCCCACCCCAACCC
GACCCCAATTCTATCTCCATCCCCATCCCTACCCCACCCCAACCCCATTT
CTATTCCTATCCCATTTCTACCCCACCCCAATCCAACCCCAGTCCCATCT
CCATCCACACTCCATCACATTCCCATTCCCACCCTGTCTTCAATCCCCAT
TCCATCTCCATCCCAAACTCAGCCCCAGTTCCCATTTCTCTCCCCATCCC
CACCCCATCCTACCCAGTCCCAATCCCAGTTCCAAACCCACATCATTACC
ATTCCATCCCAACCCCATTCCCAGTGCCCAGCCTATACCCATCCTTACCC
CCACCCCAATCCCCATCCCATTCCCCATCCCATTCCACGGCTACTTCCAT
CCCCAATCCCATTCCATCCGGTTCCCAATCCCATCCCCATCCCTACCCTT
ATCCCCAGCCCCACCACAACCCCATCCTCATTCAAATCCCAACCCCACTC
CGATCCCACTCCCACTCCCCCCGCCCCGTACCCAGCGCCGAAGCCGCCAT
CAGACCCATCACCGCGGCGCAGCGCCGGCGCTCCGGGCTCAGCGAGAGGA
GGAGGCGGCGACCCGCGCCCATCTTCCCCATCGCGGCCCCGATCCCCCTC
CGGCCCGATCCCAATGCCCGGCAGCGGCCGGAGCTTCTCGGAAACGAGAG
CGTCTCTCATTGGCTGAGGCGGTGCAGCAGCGACGCTGCTCATTGGTCGA
GATGGTTTCGCGTCATCAGTTGCCAGGCAGATCGGAACACTGCAGTTTGG
AGAGGGGCGGGTGATTGAAAGTGAAAGTAACGGCGGAGCGGGAAGGAGAT
GGAGAGCGGCGGCGGTGAGGGGCTGGAGGGGGCTGGAGGGGGATGGACTG
GTAGGGGCTGGTGGGGTCTG[illegible]
```

FIGURE 10

SUITE 55

```
GTGGGGACTGTCGAGGGGCTGGAGGGATCTGATGGGGACTGGAGGGGTTT
GGTGATCGCTGTTGTGTGCTCCAGGCTGGGCTGTGGGGAGCCGGACTGGA
AGTGGGGGCCGTTCTAAAAGCACTGCTGTGTGTTCCAGGTGCTGAGGGGA
GCTGAGGACCTGCACCAGGAGCACCCCGGGGAGCCCACCTGGTCCAGCTG
TGCACCAGAAGCTCTGGGGATCCCCACCCCACAGCCATGGCGATGCCGCC
CTACATTCTGCGCCTGTCATGCACGCTGCTCCTGGCCGACCTGGCCCTCA
TGTTGGCCCTGGCCCACTTCTTCCCAGCACTGGCCCATTTGGGCTGGGTG
GGCTCCTGGCTGGAGGCCGGGCTGCGCCTCCTGGTGCTGGGGGGGCCGG
GCAGCTGCTGGCCCCCAGGGGACCCCGTGGGGCTGCAGTGCTGCTGAGCC
TGGGCCCCGCCATCTTCCTGACCCTACGGGGCTATGTAGGTCTGCCTGGA
GCTGCCCCGGTGCTGCTGGCCATGGCAACGCCGTCCTGGCTGGTGCTGAC
CCACGGGACAGCTGTGGTGGCATTGCTCACCTGGAGCCTCCTGGTCCCCA
CTGTGGCCACTGGGGCAAAGGAGGCAGAGGCCTGGGTGCCCCTGAGGCGG
CTGCTGGCCCTCGCCTGGCCCGAGTGGCCCTTCCTTGGCTGTGCCTTCCT
CTTCCTCGCATTGGCTGCACTGGGTGAGACCTCAGTGCCCTACTGCACCG
GGAGGGCTCTGGATGTCCTCCGCCAGGGGGACGGCCTCGCCGCCTTCACC
GCTGCTGTCGGCCTCATGTGCCTGGCCTCTGCCAGCAGGTAGGGACCCCA
CATCCCTCCACAAAACCCCATCCACCTCTGGTGGTCGTCTGGTGGGTTTG
GGGGTCTCTGTCCATATCTGGGGGTCATCTGATGGGTTCTGGGCACTCCA
CTGACCCTTTGTGATTGTCTGAAGGGTTCTGGGCTCTCCATTGACCCCTG
ATGGGTTTTGGAGTCGCCCCCCCAATTCCTTCCCAGCTCGCTGTTTGCCG
GCTGCCGCGGTGGCCTCTTCACCTTCATCAGGTTCCGCTTCATCTTGCGC
ACCCGCGACCAGCTCTTCTCCAGCCTGGTGTACCGGGACCTCGCCTTCTT
CCAGAAGACCACAGCAGGTACAGACTGGGGGCACTTTTGTCCCTGTCCCC
ACACCATACCCCCAGCTCACCCTACTCAACTCCACAGCTGAGTTGGCCTC
CCGGCTGACCACCGATGTGACGCTGGCAAGCAACGTGTTGGCACTCAATA
TCAACGTCATGCTGAGGAACCTGGGGCAGGTGCTGGGGCTCTGCGCCTTC
ATGCTGGGGCTGTCCCCGCGCCTGACAATGCTGGCACTGCTTGAAGTGCC
GCTCGCCGTCACCGCACGGAAAGTCTATGACACCCGGCACCAGGTGATAG
CAGGGATGGGATGGTAGGGTTGGGGTGACAGGGATGGAGGCAATGGCAAT
GGGATGGGAACAGTGGGAGTGGGGATAGTGAGGTGGGGATTGTGGGGTCA
GGGTGGCAGGGATGAGGGCAGCTGCAATGGGATGGGAACAGTGGGAATGG
GGAGAGCAGGATGGGGATCATGGGTCCAACACAGCAAGGATGAGAGGATG
GAGAAGAGTGGAGCAGGAATGGAAGTGGGATGGCGAGTACTTGGCCATCC
CATGGGTGCTGACACCCACTGTCCCCCCCAGATGCTGCAGCGGGCCGTGC
TGGATGCAGCAGCCGACACCGGAGCGGCAGTGCAGGAGTCCATCTCTTCC
ATTGAGATGGTACGGGTCTTCAATGGCGAGGAGGAGGAGGAGCACCGCTA
CAGCCAGGTGCTGGACAGGACCCTACGGCTGCGGGACCAGCGGGACACAG
AGAGGGCCATTTTTCTCCTCATCCAGCGGGTGAGGCTGACACGAGGGGAC
ACCCTGGTGTCTGGGTGGGATCGGGACATCCCCGCTGAGCCCCATCCCCA
CAGGTGCTGCAGTTGGCCGTGCAGGCACTGGTGCTGTACTGTGGGCACCA
GCAGCTCCACGAGGGGACCCTCACTGCCGGCGGCCTCGTTGCCTTCATCC
TCTACCAGACTAAAGCTGGCAGCTGCGTGCAGGTGAGGTCAGGCAGTGCG
TCCTCTGCCACCGGATCCCCATGACTGTGGCCACATCCCCGTGTCCCCAC
CCTGGGTGCTGTGCCTGGGGGTCACATCCCCATGTCCCTATCCTGGGTGC
TGTGCCATGCAGGCACTGGCGTACTCCTATGGTGACCTTCTGAGCAATGC
AGCGGCCGCCTGCAAGGTCTTTGATTACCTGAACTGGGAGCGAGCTGTGG
GTGCTGGTGGCACCTACGTGCCCACCAGACTGCGAGGCCACGTCACCTTC
CATCGGGTGTCCTTCGCCTATCCCACTCGCCCTGAGCGCCTCGTCCTGCA
AGATGTCACCTTCGAGCTGCGCCCCGGTGAGGTGACGGCGTTGGCGGGGC
TGAATGGCAGCGGGAAGAGCACCTGCGTGGCACTGCTGGAGAGATTCTAT
GAACCTGGGGCCGGGGAAGTGCTGCTGGACGGGGTGCCGCTGCGGGACTA
CGAGCACCGCTACCTGCACCGCCAGGTGAGGGGGTGGGGGGAGATGTGGC
TGCACTGAGCAGTGCTGGGGCTGAGCCTCTGCCCTGGGGCAGGTGGCACT
GGTGGGGCAGGAACCCGTGCTCTTCTCTGGCTCCATTCGGGATAACATTG
```

FIGURE 10

SUITE 56

E1REV.txt

```
CCTACGGGATGGAGGACTGCGAAGAGGAGGAGATCATAGCAGCTGCAAGG
GCTGCGGGTGCTTTGGGCTTCATCTCTGCACTGGAGCAAGGCTTTGGCAC
TGGTGAGTGCTGGGGAGCAGGGGGGGACCCGGGTGTCTGACCCCACTCAT
CCCCACCCTCATCCTGCAGACGTAGGGGAGAGAGGGGGGCAGCTGTCAGC
GGGGCAGAAGCAGCGCATCGCCATCGCCCGCGCTTTGGTGCGGCATCCCA
CCGTCCTTATCCTCGACGAAGCCACCAGTGCTCTGGATGGGGACAGTGAT
GCAATGGTGAGCACTGAGCAGTGGGTGGGGGGAGGGTCTGGCCCTGCAGT
GCATGCTGATGGGCAGCTGTGTGTCCTACAGCTACAGCAGTGGGTGAGGA
ACGGAGGGGACCGGACGGTGCTGCTCATCACCCACCAACCACGGATGCTG
GAGAAGGCAGACCGCATTGTGGTGCTGGAGCATGGCACGGTGGCTGAGAT
GGGGACACCCGCCGAGCTGAGGACCCGCGGCGGACCCTACAGCCGGCTGC
TACAGCACTGAGAACCATGGAGCAGCTGGAGTGGCATGCGATGGGATATG
GGGAGCAGTGACTGCCTCTGCTTCCAGCTGCAGGATGGGATGCTCTGGGA
TTTGTGTGGAATAAAGTGGAGATGCTTTGTAGAGGAGTGGGTTGGGATGT
GGGGGGTGGGCAGCTCATCCTCAGTGCATGATTGGTTATGGAAGCTGAGT
GTTTGCCCTCAGTTGCAGCAGCACTGTAGGTTATGGAGGAGAGGCACAGC
TCAGCCCGAAGTGGGACGAAGTTTCCAGCCATGTCTCCATATGAAAGCCA
TGCAGATACCAAGGAGAGTGCAAGGGCAAATGCTGGGAGAAGAGGGAGAG
CAGCAGTGTGTGATGGAGTGACAAGCAAGGAGTGTGGGGTGGGCACAGGA
CTGCAGGGGGTGGGAGGGACTTCTGTGTTCCCCAAGCATTTCCCTACAGC
AGTCACACCAGGTGGGCTTTGAGTATCTCCAGAAGAGACCCCCACCTCTG
GTCAGCCGTTGCAGTGTTCTGTGTGATCAGGAATGGACAAAATGGGGCTC
ACTGAGGTCACTGTCAGCCTCATGTCCGGGCAAGGGAAAGCTGGCCAGAC
CAGACCAGTCTGTGGGAGGGAAAGGAAAGAAAAAGTGGTCTTGCTAGAGA
TGTACCTGTGGGGAGAGGTGAGGGGGAGGAACACGGAGGCTATCCCAGCA
CACAGGGATGGCATCACAAAAGCCAGAGTTCATCCTGGACAGCACTTCCA
GGACATGAAGCTAGCAACCATCAGCGTGGGGGCACAGGGGGGAGGTGATG
TGGGATGGGGGGAATGGGGAGGGCAAACAGCAGCCGGAGGGAGGAGGGCA
GGGTGGTGGGCACTCAGTGCAGGTCCATGCCTGCATCCAGAGAAGCCGAG
CCAGGACACGGCCCCCTCACCCATCCCAACCCAAACCACAGCACAGAACA
GACTGCGGGCAGGCTGAGAGCAGATCTGCAGGGCCACCATCAGAATGGTT
CTGATACACAGGGCATCAGAAGCCTGTCCACAAGTTGGATCCTCGTAGCC
AGAGGGTAAGGATGTGCAGTGCTGATGGTGACGGGGCGGGCAGCCCTGGT
ACAATGGGTAGTGGTGTTGGACGGGGGAGAGGTGTGGCAGCAGGGACCCC
CCCACGAGGTGCTGCGCCCCGGCAGCCTTCTGCGGGACTGGGGACAACAG
GGAGCACCGGGGGAGGGGGACAGAGGGAGAGGGATAGCGGGAGTTATGGA
TGGGGAGGGCAGGGGGTGGTGGGATGTGGGATGGGGACACTGCACGTTGG
GGACACTGAGGGTGGAGGTGGGGACACCGGGGCAGCGACAAGGGACCACA
AGAGCTGTGCCGTGGGCACATGGATGCCGAGCCGGGCGCGCTGCGGTACC
GCTGCTGTACGACACACAACGGCCACTGCATGGACTGCAGTGCCACTGAG
TGCCACCAGGGCCGGGGGTGGGACACAGAACTGGGAATAAAGCCGCATGT
TTGTACCCGGGTGTGTTGGGATCTCAGCGCGGGGAGTCCCGGTGCTGTAA
GAAGTGCAGGGAGAATGAGGGACCCCCAGAGCCCCTTCCCCCCAGGGAGA
AGAGCGGAGCCCACAACAACAACAAATCGGGGGGGAAATAAACCAGAAGA
CGGCTGGAGGGCAGCAGAACAAACGTATTTATTTGGGTGTAGGGTACAAT
GTGGGGGGAGGGGGCCCAGCAGGGACAGGAGAGCTGGGGGAAGGGCGGGA
TGAGGGAGGTGGAGTGGGCAAGGTTGTGGGTGAGGATTGCAGAGGCAGCT
GGATGGGCGGGGGGGGAGGGCAGAGAAGGAAATAGGAGTGCTGTGGGACA
GCAACCTGGGGGGGAAGTGGGGTGGATATGTGCAGTGACTGCTGGGGGGA
GGACCAAGGAGACCACATCCCAACAAACAGGGATGCCATTGGGAAAATGA
GAGTTCTGCCAGGACAGGGAGCAAGCAACCACCAGCATGGGGTCACAGAG
GAGAGGTGAGAAGGGATGGGGGTACACAGGGGGGAGTGAGCAGCAGGCAG
ATAGAAGAGGGGAGGGCAGTGGGTACTCAGCACAGGGCCACATCTGCACC
CTGAGCAGCCAAACTGGGACACGGTCCCCTCATCCACCCCATCCCCAACC
ACAGCACAGTGC[illegible]ATCATT
```

FIGURE 10

SUITE 57

```
TTATTTCACAGGAAGCAGTGCAGGCAAAGCATAACAGTCAGCATAGGAAG
CAGAATGAGATGTGAGAGGTCAAGAGGATGGGGCTGTGCCCATCACTGAC
CCCAAATGCTGGTGTGGACTGTTGGCTCCTTGCAGGCTGAAGCACAGCAC
TCAGATGGCGGGGTTGCTCCCTGTGGGGATGAGAAGGGATGATGTCCCAC
GGGGCCAGGTTCACATCCCAACCCTCTGCTCCGGGGGTCTCCCCGCAGAG
CCCCAGCATAGCCCAGCCCTGGGCAGTACCACAGAGAGCACACGGACCCC
TCCCAACCCACAGCCCCACACCGCACCTGTGCTCGAGCTGCTGGATCCAC
CTTCCCTGTCTATAAGGGAGGAACAGCTGTGAGATCCAGCCCTGTGCTCC
CTATGGGGCGTGGAGCAGCCCCAAGCACCAGGAATGGGTACCCTGGGAGA
AAGTGCAGACCCCAGGACCGCCCTGGCACTGGGCAGAGGTGGGGGACAGC
GCTGCCCTCATCACTCACCGGGCGCGATGTTGTAGCCCTTCCCCTTCTTC
CCTGCAGACAGAGAGATGCTTCAGCACAGGTTCACATCACAGCCAGGCTG
AGGGCTCCCAAGGGGGACCCAGATCCCCCCACTGCCCGCCTGCACCCCTC
TGCTTTTACCTGCATGGCGTCTGTAGATGATGAATCCAACACCAACCATG
ATGGCAATGGCCACAATGGCGACGGCCACCCCCGCCACGATGGGCACCAG
GTTGGGCTGTGGCGGCTCTGGGGGAGAGCGGGGCCATCAGCAGGGGAAGG
GGCAGCCCGCAGCCCCCCAGCCCCACATCCCCTCACTCACCCCACGAGTA
GAGGCCGGGCTGGGGCAGGCTGGCGTGCTCCACGCGGCACTGGTACTTGT
CCCCGTCCCCCGGCTGCGCATCGATGGTGACCCAGGTGTGGTAGGTGCCG
TCGCCGTTGGGCACGATGCCCCCCGAGTGGGCGTCCTGGCCCCGCACCGC
GCCGTCCTTCAGCCAGCTGACAACGATGGGCCGCGGGTAGAAGCCGTGAG
CGCGGCAGGACAAGGTCAGGATCCCGTCGGCCTCCTTCCCCCACACTCGC
ACCTCGGGCCGCTCTGCGGGCGGGCGGCAGTGAGGGCCGGGCTGAGCTCC
CCACGCTGAGCCCCCGCCCCACGTCCAGCCCCACACTGCAGCCGCTCCCC
CCCCCACCCCGCTCACCTCTCCTGCCCAGCTCAGCCTTCCCGTATTCCAC
GTATCTCCGCAGCCACTCCACGCAGGTTTCCTCCAGGTAATTCTTCCACC
TCTCAGGTTCACTCTCTTCCTCCCATTTCCTCTTGGTGGGAACTGCCTCT
GGAACTGCCGCAGTGAACGTCATCGTGCCTTTGTCGAAGGCAGTGAAGTC
TCTCCCATCGTAGGCCATCTGATAATACCCCCGGATGGGGCCGCCCTCGA
GGATGTCACAGCCGTACATCCACTGCACCGTGTGAGACCCTGAAACACAG
CCGGGCAGGGGGTGAGGGGCCCCTCCGGCTCCGGGGCTCCCACTGCAGCG
GGGATGGGTTGGGGTCCCCCCGGGACGCGGCACCCCGAGCGCGGTGGGGC
TGTGACGGGCAGCCCCGGGACGGTGCCGCCGGGCAGGGCCAGGCCTGGGG
GGTGTGGGCGGCACTGCGCCATGGAGCCCATCCCACACCCACGGAGCCGC
GGCCCCGGCCGTGCTCACCGCCGGTCTGGTTGTAGCGCCGCTGCAGTATG
CCCAGGTTCTCGCGGTCAATCTGCTCATTGCCCTGTCCGATCTGCGTCTG
TCCATCCCAGTACTGCTGGTCCGCCTTGGCCGCTATCCACTCGGTGCGGG
GCACGTACCTCCGCGCGGTGCTGTTGTAGTGCACGAAGAGTTCCCCGTCC
ACGTACCCCACAGTCACGAACCACGGCTGCCCGGGGCCGGGATCCGTCAT
CGCCGTTTGGATGTACCGCAGGGTATGGAGCTCTGCGGGGACGGAGCACA
GCGGGGCCGTGAGCCGCGGGTGTGGGTCTGAGGATCCCACGGACACAGCC
CCGGGGTGGGGTTACGGGCGGGGAGGGGTCCCGGTCCGGCCGCACTCACC
GGCCGCCGCCCCGCACACGGCGGCGAGCAGCAGCCCCAGGCCCAGCGCCC
CGCACGGCCCCATCGCCTCGCACCGCTGCACTCTCAAGTCCGCCGCACCC
AGCGCAGCTCCTTCAGCTTTTCCTACTCCTCCGCCCCGCCCCGCGCCCCC
ATTGGCTCCTCCGTCGCCTCTCCGCCAATGGTAGTTGGAGTTTTATGTGA
CGTCATCGGGCGCCAGGCAGAATGCGCTCCCTCAGGTTGTGAAGCGAAAG
CGAAAGCGCGGAGCGGGGGAGGGGATGGGCGCGGTGTGGGAACCCCCGGC
CCTTCGAGCACGGGGGGGCACCCGGGCTGTGTTCGCACGGGGCCGCGTCC
TTACCCCGGGGGAGGGGGCCGAGGGTCTCTGCCGGGAGGACGGGGGCCGT
GAGAAGAGGAGGAGTCATTCTCCATTCCAGTCAAGGAACTGTTTGGGGGG
GGGGTCACATCCATAGGGTTAGAGGCTCCGTGTCCGGGGGGGAGGGGGTG
GTGACAGTGGTGTCCCCCAGGGCTTCCTTTGGGATCAGTGCCATTTCCCC
ACAGCGCCGCCCCACACCGCTTCCCCACATCCACGTGGTCCATCTGAGGT
CGATGCCCTCAGGGTCTGCAGGTGGACCCCAATGTCCACCCCCCAAGTTA
```

FIGURE 10

SUITE 58

E1REV.txt

```
ATGATTGACCCCAACCCCGCTGTCCCTGCGCCACTGCTCCCATCTGCCCC
ACACTGCCGGAGCCATGGGGCCTCACTGGGCCTTCAGCCTCTTCCTCCTC
CTCTTCCTCACTCCCTTAATGAGGGCCAGCTCCCAGGACCCTGAGTATGG
GGCTATGGGGTGTTTGTGGGGTAGCTATGGGACTATGAATGTTCTGCAGT
GCCTATGAGGGACTATGGGGCACTGGTGGGGCTGGGGGCTGCTATAGGAT
TGGGGTGTGATGGAGTCTGGGGGGACTAAGGGAGATTTCTGTGTGGTTGG
GTGGGGTTATGGGGCCAGAGCTGGGGGGATTCCTATGGACCTAAGGGGTG
TCTGGATGCTTATGGGATCTGGGAGGGCTTATGGAGCAGTTATGGGGCTG
GTGGCTCAAGCAGTGTTCCCTCAGGTTGGTGCTGGTGGCCCCCCGGCGCG
TGGCCTTGGGGACCCCCATGGGGCTGTTGCTGGCAGCTGTGGGGCCGGTG
ACCGGGACGGTGACTGCATGGGCTGAGGGGGACCGTGGGGCTGGGCCCTG
CACCCTCCCAGTCCCATTTGCCCTCACACCCCACAACAACTTCAACCAGC
TCCTACAAATTGAGGTATGGGGACACCGGGGGATATGGGGACACTGGGGG
ATGTCCTCTGGGGTGAGGGGGTTGGGGACACCCCTGTGGCACACAGGGAT
GTGTGCACCCTTGGGTCCCCTCCTGCCATGTCACCCATGTCACCTCACAT
CTCCTTCCCCAGAGTTCCCCCCATGTCCCCATAACCCAAACACCTCCTGC
TGTGTTCCCATGTCCCTTATAGGTCACCCCAGTGCAGGCAGAGCGCTGTG
GGGCGCTGTGGGGTCGGGGGTTGCTCCTGGAGGCCCACAGCTCCCATCTG
CCCCCCCCCAGTACCAGGAGTCTGAGTGTGGCCCTGGGGGGGCCGCGGGG
TCACCTCATTGTGCAGACAGACAAACCTCTCTACGCCCCCCGACAGACTG
GTGAGTGCTCCACGTCCACCCTAAAGCCATCCCTCATCTGCCCACAGTTC
TCCCCCCAGTGCCCCAAATGCTCCAATTCCCCTAAATCAACCCCAAAATT
CTCCCCAAAGCCCCTCCAAATCTACCATGAATTCCCCAAATCCACCCATT
TTCACCCTACATTCACCCATTTACCCCAAATTCACCCCCAGCACACCCCA
AATACCCCTGGTCACCCAAAGTCCCCCAAATCCCCTTCAAATTCCCTAAA
TCCATAACCCCCATCTGTCCCCATGTGTCCCTTTGTCCCCAGTGCGTTTC
CGGGTCTTCTCCATGGACCCCGACCTACAGCCGAACCCCGAACCTGTCCT
GGTCACCATCACGGTATGGCCCTATAGGGCTGGGGCTGTGGGTGACCCT
GTGGGGTTTGGGTGACCCTACAAGGCTGTGTACCCCCATGTACCCCCAGA
ACCCGTTGGGTGCACGAGTGCGGGAGGTGCAGCGGGTGCCCCTGGACACG
GTGCTGAGCGACCAGCTGGTGCTGCCTGACATCGCCCTGTGAGTGGGGCT
ATAGGGGGCTACAGAGGGCTGTGGGGTGCGACAGGGGGCTATGGGGACTG
GGGACTATGGGGATTTGGGGCTACAGGGGCTGCAGGCGGGCTAGAGTAGT
GGGGGGGATTATAGGGTTACTGGGGCATTACAGTGGCCATAGAAGCTATA
GAGGGCTGTGGAGAACTATAGGATACCTTAGGGGCCATAGGGGTCTACAG
GGGTTATAGGTGAGCATGGGGAAACATAAGGGCCATAGCGACTCCGGAGG
GCTGTAGCACACCATAGGGGCCATAAGGGCCCTGGAGGGCTCTAGAGGAC
CACAGAGGTGTATGGAGGGGCTATAGGGGACTATAGGGTATAT
```

FIGURE 10

SUITE 59

E52FOR.txt

```
ACATGGGAACACATGAGGACAGGGAGAAACTGCAGGGACACAGGGACACT
TGGGGGATAGGGGGATGGTAGTGATGCATGGGGGGGGCACATGGGGATG
TGTTGGGGCACACTGGGATGTGTGGGGATATGGGGACACATGGGGAATAT
GGGGATGAGTGGGGACATATGGTTATTATAGGGATGTATGGAGACATTGG
GACACATGCAGAGGAGGGGACAAATGGGGACACACTGGGGGACAGATAGG
GACATGGGGACACCCAGGGAGGGACACCCCAAGTTCCCCCTTACCGGCGG
CAGTGATGGTTCCTTCTGTGCCCATCCCCCCCTGCAGCAGCGCAGTGACA
CCGTACTGCGGGGTCCCCACCGCCGCCACCCACCACTGCCCCCCCGCGGT
TGGGGGGCTGCGGGCGTCGGGGTGCAGAGGGCGGCTCCATGGGTCAGAGC
CGGTCTGGGGGTTCGTGGGGTTCAGTTCGCAGCTGGGGGGAGTCCGGGGG
GGGACCCCGAGTGGGGTCAGAGTCCCCCAGGGGTCTGCGAGGGAGAGAGG
AGTGAGAGGGATGAAGGGGTCTGAGGGCATGGGGTTGGGAGGGGTGTGGG
GCGTAATGGGGTCATTTTGGGGTTAATGGGGACACTGGGGACAGTTTGGG
AGCTATTGGGGCTAATGGGGTCTCTGGGGGACATGGAGGGGACATTGGGG
ACATTTGGGGTGTAAT
```

FIGURE 10
SUITE 60

```
TGGCTGATGGGCTGTGTCCTATGAGCGCAAAACACCACAATGGGCAGAAA
AACCTTCCTCCAGAGGACCAACCCCATCTCTATGGCTTCTTTGCACCTGG
CCTTGCCCAAAATTGGGTTATTTTTGAGAAAAAAATGGGCCATTTCTCTG
CTGGTTGTCCAAGCAGCAAGAGATGCTGGCATGAGTCTCACCAAGCCAAG
AGGTCTGTGGGACCAAGAGAACTCTTTTCTCTCCCATTAATGATGAGTAA
CTCCACCTTTGGGCACTCTTAAGGTGAAAATCCTCAAAATCTGCAATTTT
GAAGGCGCAGCTCCCACATTTCTCATCCCCTTTGTTCTGTCCATGGCAGT
GCAGGCATTCCAGCCCCATCCCCAGCCCTGTGCTCAGTGTCCCTTCGACT
GGATTGGATTCAGAGGAAAATGCTACTACTTTTCAGAGGATGAGAGCAAT
TGGACGAGCAGCCAGAACAACTGCTCTGCTCTTGGTGCTTCCTTGGCTGT
GTTTGACAGCGCTGAGGACTTGGTGAGGGGGACACAAAAGAGCCACCAAT
GTATTTTGTCCGCTTGAGGGCCCCTTGGCTGCTCTTTCAGTGTTTCCTTT
CTGATTTTGGGGTGAGGAGGTGGATAATGGTTGTCCTGAGGGTAGGTTGG
GTCTACTCCTCAAAATTCTTCAAGGGATTTAAGGGAAAAAAAAGATGTTT
TTTCTATGAAGTAACCACGCTGGCTTAGAGACTGTGAGCTTTGGTGATGG
ATTGGGCAGTTTCAAGCACTGAGATTATTGGTTGAAAGGGTTCTGCAGGC
AGTGGCATGCAGGAAATGTCCCAGAGCCCCATGATCTGTTCCCTCTCCTC
TTTTCCAGAGCTTCACAATGAGACACAAAGGCAGCTCCCCCCACTGGGTT
GGCCTCTCCCGGGAAGGCAAAGAGCATCCATGGGAATGGGTGAACCGCTC
TCCTTTGTCTCACCTGTGAGTTCCCATCCTTGTCTTGGAGGCTGCAGCTT
CTCCAGCCCCAAAATGTGGATTTCTGGACCTCGGGAGCATTTCTGGAGGT
GGCTTATGGGGTGAGGAGATGTGGGGAAGGCACTTCGCACCGCTTTGGGT
CATAGAAGTTCATTGAGAGGCAGAAGTGGCGCAGGAAAAAGAGATTCCTA
TTTAATCAATTATTTTGTCTGTTTGATTTCACCACTGTGATTTCCTCTTC
CCCCCCCCCCCAMAACCTGGGGTCTGCCTGTCCGTCTGTCTGTCCATCCA
GGTTCCAGGTGCAAGGCGATGGTCTCTGTGCATACCTGGGGGATGCCGGG
CTCAGCTCCTCCCACTGCAGCACGCGGAGGAATTGGGTTTGCACCAAACC
CGCGTTGCAAAAACCGAGGAAGAACTTCTGCATCAGCACCTGAGCGGCTC
CCGGACCCGAACACGCGATGCAAGAGGAGGAACCCAAAGCAAAAGAGCTC
CGCTTTCAGCTGTGCTCAGTAGCAACAGGAGGGCGGTGCGCTCCTCCAGC
CCAGGTCCGACAGTGCCGCCTATGGGGCTGCGCGGACCGAAGCAAATCCC
AGGCGGAGCTTCGGCTCCAAATTACATTTTTTTGCACCGTCTGACTCCTA
ATGACCGCTAAAATCCCAATTTTGGGGGCTATCCGTGCGCTGCTTGCAAC
GACCTTCACCCCTGCGCGATGCAGCAGCAGGTTTGGGGGGCGGACGGTGG
GAAAATATCCATTTTTCACCGGTTTTTCTCCAAAGGGAAATACTGGGAAA
GCAATCAGCCCAAAGGACCCTGAAATCGATGAATAAATCGGCAAATTATT
TATGTTTCGTGTTTTCCCTTCTGTGTCACTGCAGTGCGTTCTCCATGAAT
TCACTTTTAACGGTGTTTTGTCACAGGAAACACTTCTTCGACTCTCTCCA
CCACTCCTATATATTCAACAGACCAATTCCTTCTGGTGATTTTATGCAAA
AACAAAAGAGTATATTTGGTTAAAGAACCCAAACCACCTTCTTGTACTGA
AGGGAATAGAAGAGCACAGACCGCCCGCTCCCCTCCCCTGCTGCCGCACA
ACAGACGGTCCCCGAGGATGTGCAGACAACGCGACGCCGTCTGA
```

FIGURE 10

SUITE 61

E6G2N15.txt

```
TAGNAACTAGNGGATCCCCCGGGCTGCAGCTATGGGGGAGTGGGTGCACT
CCTTGGCCATGGCTTTGGGTCCCGTTACTCTGGAGGAATTTCCACAGCTG
CCCCAGGAATCTTGTACATAAAAGTGCACAGATCGATCAGAGATGTCATG
TTCCTGACAGAAGAAATCCTGTCTCTTCTGATGTTCTCTGTGAAGAGCAT
TGCCACGAGGGAGCTACCAGCAGGGCAAGCAGAGAAATTGAAGAAAACGA
AAGATGGGTCGAGGTACGGGATTGGGCAGGTTTCACTTTCTTTAGCAATG
AGACGTGTCAAGCTGGCAGCTTCCCTGGGAGCCTCTCTGGTGTGGATCTC
CGGTGGCCCTAAACCTGGTTCAGGCACTGATCAAGGAGACATTACCCGTC
TTGGTTCATCTCGGCTCACGG
```

FIGURE 10

SUITE 62

F12FOR.txt

```
CGATGGTCCTCCAATGACCTCCATGGTCATCCAGTGCTCATCCCGCGGTA
TGGCCATGGTAACCCCATGTTCACCCTGTGGTCTCACCCCAATGATGCCG
TGGTTACCTTTTCGTTACCCTATTCTCATCCCATATCCCCCCTTTCTGTC
CCTCTGCCCCTTCATGATCCCCTCATGGTTAACAGACGTTTCCCTCTGCG
ATCAGGTCATGTTCAGCACAAATTCCTCCAGGGTTCCCTTTATAGTGACC
TCACCATTACCCAATCATGTCCCCGGTGTCCCTGAAGGGGCCCAGATTTC
CTCAGTGGGACCCAGATGTCTTCAGTGGGGCGGGACCTGGCCATTCCCAA
TGTCATCCAGGTGTCCATATGGCATGGGACACAGATGTGCACATGGGATG
GGACCCAGGTGTCCCCACTGTCATCCAGATGCCTCCATGGGTTGGGAAAT
GACCATCCTCGATGTCACCCAGATGCCCACATGTGATGGGACGTGGCCAT
CCTTCATGGCATCCCGATGTCCAGCTTGGGATGGGATCCCAATGTCACCC
AATGCAATCGCAGTGTCACCCAGATGTCCACAAGGGATGGCACCCAGATG
TCCCCAGGTGCCACTCATCTGCCTCACCAACCCAGGACTTCCTCCCACTG
CTCCCACTGCTCCCAGTTTGCCCCCATTTCTCCC
```

FIGURE 10

SUITE 63

G2M13.txt

```
GATCTTCAGTGATTTTCAGTGGTCTTTGGTGGTCTTCAGTGCTCTTCGTT
GGTCTTTGACAAAGATGCAGAGGAGCACCGCTCCCAGACGGACCCCCCGG
GGACCCCATTTGTCGCCATCCCCACTGGGACATGCAGCCATTGACCACAG
CCCTCCGGCTGCGACCACCCAACTGATTCCTTATCCAAAGTCCACTCTTT
GCACACTTACCTCCAATTTAGTGATAAGGATGTGGCGTGGGACCGTCCCA
ATGGCCGCACACAAGTCCAGGTAGATGATATGGGATGACCATGAAGGGAT
CACAGAGAGGAACACGGGGTGACCACGAGGAGCAACGAAGGAAACGCTGA
GTGACCACGGGCAGAAAATGGTGTGACCATTAGGGGACAACGAGAGGGAA
CAGAAGTAGTAAGGAGTGAGAATGGGGTGACAAAGAGGTGACCATGGCAT
AACTTTGATAAGACCATTGGGTGACCGCAGGGTGATGGCCATACCATGGG
GTGAGCACTGGATGACCATGGAGGTCATTGGAGGACCATCGGGTGGGACG
AGGGCCGTGGGGACACCCGTGGGGCGGTGGGACGGGGGCAGAGTGTCAGA
AGGAGCCCCGCGGCGCAGAACTCTGCCTGGAGACGGGTGACGCCGCCCGG
CGCCGCCGCCGCTCATTGGCCCTCCCCGCCCGGCCCCGGGCTCGCGGCTG
GCGCGGGGTGCCGGGTCCCCCATCGTCCGGCGGCAGCAGCCATGGGGAGC
GGGCGCGTCCCGGCGGCGGGGGCCGTGCTGGTGGCACTGCTGGCGCTGGG
AGCCCGGCCGGCCGCCGGCACGCGGCCCTCGGGTGAGCTCGGAGCCGCGG
CGCGGGGACGGCGCTGCGTCCCCCCCGGAGAAACCCCCGGAGCCCTTCTG
GCCGTGCGCAGCGCTCGGGGCTGCGGGGGGACGGAGGGCGGGGGGGGGCG
GCGGAGCCGTGGGGGGCAGCGGGGCCGGGGAGGGGGCGGGGGGTGTGGCG
GGGGGCGGCTGTGTGCCCTGACCGTGCCCTCTGCCCGCAGCGTTCTTCTT
CTGCGGTGCGATATCCGAGTGCCACTACCTGAACGGCACCGAGCGGGTGA
GGTATCTGCAAAGGTACATCTACAACCGGCAGCAGTTCACGCACTTCGAC
AGCGACGTGGGGAAATTTGTGGCCGATTCACCGCTGGGTGAGCCGCAAGC
TGAATACTGGAACAGCAACGCCGAGCTTCTGGAGAACCGAATGAATGAAG
TGGACAGGTTCTGCCGGCACAACTACGGGGGTGTGGAGTCCTTCACGGTG
CAGAGGAGCGGTGAGTGCCGCGGGGCGCAGCGCGGACGGACGGGCAGGCG
CCGCGCTCTGGCGGTCGGTCCGCAGCGCTCCCCCCGTGCCCCGCAGTGGA
GCCCAAGGTGAGGGTCTCGGCGCTGCAGTCGGGCTCCCTGCCCGAAACCG
ACCGTCTGGCGTGCTACGTGACGGGCTTCTACCCGCCGGAGATCGAGGTG
AAGTGGTTCCTGAACGGGCGGGAGGAGACGGAGCGCGTGGTGTCCACGGA
CGTGATGCAGAACGGGGACTGGACGTACCAGGTGCTGGTGGTGCTGGAGA
CCGTCCCGCGGCGCGGGGACAGCTACGTGTGCCGGGTGGAGCACGCCAGC
CTGCGGCAGCCCATCAGCCAGGCGTGGGGTAAGGCCCCCGGGCCCTGCCC
CGCCGCGGGGGGAGCGGGAGCGCGGCCCCCGGCGCTGAGCCGCCGCCTTC
GTCCCCGCAGAGCCGCCGGCGGACGCGGGCAGGAGCAAGCTGCTGACGGG
CGTGGGGGGCTTCGTGCTGGGGCTCGTCTTCCTGGCGCTGGGGCTCTTCG
TGTTCCTGCGCGGTCAGAAAGGTGAGCGCTGGGGAGGGGGGCTGCGCCGG
GGGGGGTCGGGAGCGGGGGG
```

FIGURE 10

SUITE 64

H421.txt

```
GCTCTAGAACTAGTGGATCCCCCGGGCTGCAGGATTACCAGTGTCCCCAA
CTGTTTTTGCCAATCCAAGCCCTGCAAATGTACAAATATATTAAGTGGTT
TCCTTAGTAGACATCTTTATATCTCTCACCAATCATTTAACGTTAACCTT
ACTCTGCTTTCTTCTGTGAACAGAAAACAAAATCGGAAGCCTCATATACA
GGTGTTCAGAGGAAAATAGTAAGTGGTGATGAAACTTGGAGAACTTGTGA
AGTGAAATATGGGAGCTACTGCCTCTGGAGGGAGGAAAATAAGGAACCAA
TGAAAGATGCCAAGGTGAAGCAAATGAAGGACCAGCTGTTTGTGGCTAGA
GCATACTATCCCAGTATTGCTAAAATGCCTTCTCAAAGCAAGTTGACTCG
GGATATGAAACAGAATATCCAAGAGTTTGAGCGTATTCTTAGTGAAAGTT
CTCAAGATGCTGACCTTCCACCACAGTAAGTTCTCTCCAGTTTGGGTTTA
ATCATTTTTGTACTGAAAGTTTAGTTCCTTACTGGAAAAGATTTTTGTTG
GATTTCTAGTCACATGAATCTCTCCTAGTTTGCCTTCAGTTTGCCGGACA
TCCCGTTTTCTAGTGGTTTTACTTGCTT
```

FIGURE 10

SUITE 65

```
TAACCATGAGTGATAACACTGCGGCCAACTTACTTCTGACAACGATCGGA
GGACCGAAGGAGCTAACCGCTTTTTTGCACAACATGGGGGATCATGTAAC
TCGCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACG
AGCGTGACACCACGATGCCTGTAGCAATGGCAACAACGTTGCGCAAACTA
TTAACTGGCGAACTACTTACTCTAGCTTCCCGGCAACAATTAATAGACTG
GATGGAGGCGGATAAAGTTGCAGGACCACTTCTGCGCTCGGCCCTTCCGG
CTGGCTGGTTTATTGCTGATAAATCTGGAGCCGGTGAGCGTGGGTCTCGC
GGTATCATTGCAGCACTGGGGC
```

FIGURE 10

SUITE 66

H424.txt

```
TCCCTAGTAACGGCCGCCAGTGTGCTGGAATTCGGCTTAGCGTGGTCGCG
GCCGAGGTACATACCCTGCCCGCAGTGATGTCTCCAAGGTTGATTTAAGC
AACCAGCTCCTCCCTGCCACGGCTCCAGGCTCCACATGCCTGGGTTAAGG
CTGGGTTTGTTTTTTGAGACAGTGTCTTAACTATGGAGCGCTGACTGTTC
TGGAACTCGCTCTGTAGACCAGTCTGGCCTTGAACTCAGTGATCCCCCTG
ACTCTGTCTCCAGAATGTGGATTCTCCCA
```

FIGURE 10

SUITE 67

H4REV.txt

```
GGATTCTGACACCCCTCCTCCCCCACCCCCAAAGGTGTTCCAGCGCCGCA
TGGATGGGGGCACCGACTTCTGGAGGGGGTGGGAGGAGTACGTCCATGGC
TTCGGGAACGTTTCTGGGGAGTTCTGGCTGGGTGAGGACCCCAAAACTTG
GGAAGATTGAGGTCTGGGGTGGGGGGGGGAACACCCAGGGCGGAGAGGG
CTGATGGCTGCAGGACGTGGAGTGGGATCCCTGACGGGGGTGTGGGGTGG
GGGGTGTGGGGCAGGGGCCCCAGGTGGGTGTGTAGGGTGGGGATGATGAC
GATGGCTGTGGGATGTGGCGCAGGGAATGCGGCGCTGCACACACTGACAG
CTTCCGGGCCCACGGAGCTGCGTGTGGACCTCTGGACGCCGTCAGACAGC
GCCTTCGCCCGCTATCGGGATTTCGCCGTCAGTGGTCCTGAGGACAATTT
CCGCCTTCACCTCGGGGCCTACAGTGGCACAGCTGGTGTGTGTGGGGCAG
TGGGAGCTCCTGGGGGATATTAGGGTTAACCTTGACCCATGAGGGGGGCT
TTTGGGGATACCCAGATCAGGGGGGGGGGGAATCCTGGGGAGAGTAGGGG
ATGGTCCCTTTGCCCACAGTGAGGGGGGCCTTGCCTTGCAGAGGTCTTTAA
GATCGTTGACCTGTTGGGATCTCTTGGGGATCTCCAGACTGCAGGGAGCC
CCGGGGGTTCTTGGGGGGCTCTGCCCCACAGGGTGGTCTCTGTGAGGGTG
TGGGGGTACCTGGGGGGTCTGCGGCTCATCCTTGGGGCTCTGAATGCTAT
GTGGGTGTCCTGGAAGGCTCTCTTTAGGGGTCCCCATAACCTTGCTGTGG
GTCCCACAGGGGATGCACTGTCCTACCATGCTGGGAGCCCCTTCTCCACG
CGGGACCACGACCCCCGAGGCCGCCCTCGGCCCTGCGCCGTCGCCTACAC
CGGAGCCTGGTGGTACCGCAACTGCCACTACGCCAACCTCAATGGGCGCT
ATGGGGTGCCCTACGACCACCAGGCATGGCTATGGGGGTTGTAAAGGGGT
CTGTGGGGATTGTAAAGGGGTCTATGGGGGTATAAAATCAACCCAATGGG
ACAGGAGGGGGTCACCATGAGGCCATGGGGGTTTTGTGGGGTAAATGTGG
AGGGCTACCCCCCCCCCCAAGGTCCTTTTAGCCCCATGTCTCTCCTGTATG
AATATGGAGCCCTACAGGAGCTGTGGAAGCTGGAACACAAGCTGGAACAG
GGAGGGGATACTTTGGGCCCCCCCTGTAAGGCCTATATGTGTCTATAGGGT
CACTGTAGGTTGTTTAAGGGCATGACCAAGTCCCCCTTCCTTTCTGCAGG
GCATCAACTGGTACCCCTGGAAGGGCTTTGAGTACTCCATCCCCTTCACA
GAGATGAAGCTGCGACCGCAGCGTGACTGAGAGCACTAGAAAGGTCGTGG
GTCGCAGTGGAGCCTTTATGGGGTCAATAAAGCTGCGAGTAGCCAGTGCT
GACCCATGTATCCCACACACTGGGCTCAGGAGCTATGGGGGTGGGCAGGG
CGTGAGGCGCACGCGGAACGGGGCACAGCGCAGCACGGTGCCAGCAGTGA
CCCCTAAGTGGGGCAGAGCCCCATCAGACGGTGGCTCCAGGCGGAATCGC
TGTAGGATGTGCCCCAAAAACACAAAGAGCTCTGCCCGAGCCAGCGCCTC
CCCCACACACGAGCGTGCCCCACAACCAAAGGGCAGCAGCGCTCGCCATG
GAGCCCCCGGCTGCAGGAACCGCTCTGTGGGGCAGAACAGAGATCAGAGT
GGGTGTAGGGGGAGGAACCCAGCCTGGGGTTCAAAGCCCACATCTATGGG
GTGGACCCACACATACCGGGCAGGAACTCATCAGGACGGTCCCAAATCTT
GGGGTCGTGGTGCGCAGCAAAGAGGTTTGGGATAACGATGGATCCCGCAG
GCACTGGGATTCCCGCAATGCTGGGAAGGGACAGAATGCTGATAGGATGG
ACTGGGAGAGCCTACAGAGGCCAAGTGGGACATACTGGGACCTGCTGAGC
TATCCTAGAGCTTACTGGGTGCTTGATGAGTTCTACTGGGACCGACCTAC
TGGTAGGTCCATGCTGGTCTGTAGTGGTCCACACTATTACAGACTGGTCT
ACAATGGTTCATTCTAGTGCAAAATACTGACACGCAGTGGTGCACGGTTC
TGCTCGCAGACATGTGGCCCGCACTGGTTGGTACTGATCCCCACTGGTCT
GTATGGCCCCATACCAGCCCGTACTGGTGTTACTGGCTGTACCTGGAGTG
GCGCCGGGCACAGTGGGGCAGCGCGAGGGGCACGGGGGGTCGCAGGCGGA
GGGTCTCGGTGACAGTGGCACGGAGCAGTGGCAGTCGCCCCATATCCCCT
GGCTTTGGGGTCCCCCTGGGGCCCAGCACCTGGCGCAGCTCTGCACGTAC
CTGGTCCTGCACCTGGGACAGGGGACACGTGTCAAAGCACGTCACCAAGT
GCCACATCGGGTCACTTGTGGGGTGGCCCTCCCCTGCACGGGGACACAGG
CAGCAGCGTGACACGGAAGTGACATGAGCGTGACATTTTGGCACTGGCCA
CAGTGCAGGGGACACCAGGGGCATTATGCACACAGGGTTATGGACATGGA
TGTGACATGCATATGGGGAAGTGCAGTGGAGCTATGGGAGGGGACAGCCA
GGACATGGGTGGGGAGGCCCGAATGGGACCTGGGGAGAAGCAGGTGTGGG
```

FIGURE 10

SUITE 68

H4REV.txt

```
TGTGACACAGATGTGATGTGGTGTCACCTGGGGGTGGTGCAGCAGGAAGG
CCACAGCCCATAGCAGAGCCACTGCCGTCGTTTCGGTGCCACCGATGAAG
AGATCCACGAGGGCCATGTGCAGGCGGTCCCCCCCCAGCGGCCCCATAGG
GACAGTGGGGTCCCCCCCCAGCAGTGCTCCCAGCACTGTGTCCCTGGGGG
GAGACGCACAGCCCTGTGGGACACACGTGTTACCCCCTGGGGCCCTGTC
CCCCCCCTGTACCTGTGTCCCCACGTTCCCCACCTGGTGCCATCGGATCT
GGGACTCCACAAAGGCATCGCGGCGCTCCACCAGGCGCAGCAGCTCCCGC
AGCCCTGCGTTGGGCAGCACCTGTGGGGCACAGGGACCCCCCCCAGTGCT
CCACAGAGCACCCCTGGACCCATAGGGACCCCATATTCCCTCCCAGCCCC
ATATATAACCCCCCCCCAGGGCGATATAGCCCATCCTTAGTATAGACCCC
TGCAGCCCCATATGGACCTATACCACCTCCTCTTATGACTATATCCCGCA
GCCCCACGCCGATCCTATATGCCCTGTAGGGCCCTGTAGGGCTCACCCTT
AGTGAAGGCAGCACATCCAGTGCCCGCACACTGGCCCGGCCCCACACCTC
CAGCAGTTCCACCACACAGCGCGTGAAGGAGCGCACCTCCGCCTCGGGGG
GCATCTGTGGGGCACAGGGCTTGGGGTCACCCCAGAGAGACTCCTGAGTC
CCCCCAGAGACTCCTGAACCCAAAGAGGTACCGTGGTCATTTGGATCCCT
CTAGAGGTGACTGGGTTCCCAAAGGGACACCTCAACACTTGTGTCCCCTT
CAGGGGCACCTGGATATCTGGGACTCCAAGTGGCACCTGAGCATTTGGGA
CCCACCCTCCTTGGACACCTGGGTCACCCCAAGGACACCTGGGACCCCTT
CAAGTGGCACGTGGACATCTGAGCCCCCTGTAGTGGCACTTGAGTCCCCC
TGCTCCCCCAGGTGACACCCAGACCCTGCAGCCCCTCGATATCCCCACCA
GGTCCCCGAAGGCAAGGCGGCAGATGGTGCTGCAGGTGTGGAACGTGAAC
GCCTCAAAGAGGTCCACTGGGGCAGCCCCATAAGAGCTCAACTCCTGTGG
GGTGAGAAATGGGGTCACTGAGCGGGTGCGGGTGCCCCACAAGGGGGGTT
GGGGTGAGTCAAGGGGACGGGCAGCACAGCCCTGGGGCTGATGGGGTCCA
CCTGGGGTTGGAGGGCCCTGTGTTGGGGTGCTCACCTGGCACAGCGCCCA
GCCCTGCAGCTCCAGGAGGGGCTCCAGGTGCCTCACAGCTCGCGCCAGTG
CTCCCCGCGTTGCCCCCCGCTGCCGTCGCCACTCTGGGGATGCATCCCCC
AGCGCCAGGTCCTGCCCCCCCCGCGACACCAGGGACGCTGTGGGGTGACA
CCCATATCACCCTGGCACCCATGTGACCTCCGAGAACCCCTCAGACAGCT
GTACGGATCCTTGGGGACACATCCAGAATCCCCCAGGCACCCACTGGGAT
CGCTCCAGCACCCATGGGGACTGTTAGAGATCTCCTCCCCCCCAAAAAAT
ACAACCAGACCCCTTCAGAGATCATGGGGACCCCCCCAGTACCCCCTCCA
GATACCCAACAGTGACCTATAGAGACCTCCCTCCACCCAAAAGCCATGGG
GACCCCTCAGGCCCCCCCCCAGACACCAATTAGTACCCCCCAGAACCCT
TCAGAAACCTACAAGGACCCACCAGAACCCCCTCAGATACCCATAGAGAT
CTTTACAGACCTCCTCCTGGGACCCTCCCCAGGAGCACAAATCCCAAAGA
ACCCCCCTTGAAGATTCACAGGGACCCCCCTCTGACTCACCCCAAACCCT
CATGGGGACCTCCCAACCCCTACAGCCCCCCCATACCCAGGTAACTGTGG
GGGCGTCCCACGAAGTCCCCCCAGCGCCGTGCCAGTGCCTCACGGATGGC
TGCTGCAGAGCTCAGCACCACCACCTCTGGGGGGGTGGGGGGGGAGGGGC
AAAAAATGAGTGAGTTGGAAGGAAGGGACCCCATGGGGACCCCAAAAACC
AGGGAGAGGGGAGAGGTGAGGGGTGCCAGAACGGAGTTGGGGGGGGGGGG
GGGAGGGATCCCAAATTATTTTTTGGGGGGGGGGAGTAGAATGAGAGGAC
AAATTTGAAGGGGAGCAGAAGGGAATTGGGGGACAGTATGTGGGGGTTCC
TCCATCCTCTCAATGGGTAATTCTGGGGAGCCTGTGAAGTTGAGGGTCCT
AAAGGGGGAAGGCTCAAGGTCCCAAGGAGGGAAGGGTTATGGGGAAAAGG
GGGTAATGGTGGTCCCAAGGGGTATCAGGGGGATGGGGGGGGGGGGGGGT
CATGAAGGTGCCGCCCCTACTCACCACACCCCCCCAAGCGCAGGCATAAG
GGGTCCCCGTAGGTCCGGGCAAGGATGTGGAGGTGCCGTGGCCCCCCTGG
GTGCAGGAGGTGCAGGGCCCCCCCCCACGGTGCTCCCCCCCGCCTGGCTG
ACCCCCCCCAGATCAGAGCCAGGAGAAGTAGCAGCAGAAGTATCGTCACC
GCCATTGTTCTGTGGGGTGGGGGGCCCCAGCTCTGCCCCTATAACACCTT
ATGAGGAGGAGGTACCCCAAAAGCTCCACCCCCCCACATCCAAACCCCTC
CTACCAGAAGAGGGGCATTGGGTTCACTCCCCTAAAATTATTGTGTGCCC
```

FIGURE 10

SUITE 69

H4REV.txt

```
ACCCCCCTCTTCAAGTCATTATAAACTTTACAGGGGTGTCCTCATAAAAA
TACAGGAGTGTGTCCCCCCACAAAGTGCTCCCAGAACCATCGGGTGCCCA
TCCCACAAGAAAATCTCTCAAACTCCCATTGTGTGCCCCCCAACCAACAA
AGATTCCTCAAACTCCCCCCCCCGCCCTCTACCCATATATCCTCCCAAGC
GCTCCCCACCCCTCCGCACACCACCTCCCCAAATCCTCCCCCATTACCAT
AATCCCCCCCACCCCAGCAGCAGAACCCCATCACCGCTCTGTGCGTCTGT
GTGTGTGAGTAGGGGACGGGGTGTTTATTGAGGGGAGGGGGGAGGGGGGA
GAGCGCTCAGAACCCCTCCCCCTGCAGCCCCCGCAGGCGCCGTGCCAGCT
GCAGGTCTTTGGGGTACAGTGTGACGCGGCGCGCATGCAGCGAGCACAGG
TAGGCGTCCTCCAGCAGGTGCACCAGGAATGCCTCCGCCGCCTGTGGGAC
CCCGGCGTGGGCGTCCCCACAAAGCAGGGGGGGAGTCAATTCCCACCCCC
AGGCCACCCCACAAATGCCAATCCTCCAAAATAATCCCTGGAACAACCCC
AAAAAAACCCCTACCCCCAACCCCCCTCCCCAAAACCATAACCTCAATAA
CTCCACACCTCAAAAACCTCCAACCCCTCCAAAACAACCCCCAACCCCGA
AACACCTCACCCCCAAAGACCCCTTCCCAAGCCCCAAAGAGACCCCCAGG
CACAAGGGGTACCCCAAAATCCACTTCCCCCTTCCCCCAAAAAAGCCCTT
TTGGGCACTAGAGAGCTCCCCAGCACCACCCAAAGGGTCCCCCACGGTAT
GGGGTACCCTAAAACACCCCCCAACCCCAAACCACGGGAACTTCCAAAAC
AAAGCTACCCCCCTCCCCCCCCCCCAAAAAAATAAACCCATAGGGCCCCC
CCACCTCCTGTAGGGCCAATAGGGCCATAGCCTGCCACCTGTAGTCCACG
CCCCGTGTGAAGAGCAAGCAGATCTCCCGCACCTGGGGGGGGACAGGGGG
GCATGGGGACACTGGGGGGACATGGGGGGGGGGGGGGGAGGGGGGGGGGG
GGGAGGGGCATGAGGACATTGAGGAGAGGGAACACGAGGGTGGCACTGCA
TCATGGGAGGTGACGAGGGGGTGGGGGGGGCTCAAGGACATGGAGGGGGA
CACTCA
```

FIGURE 10

SUITE 70

H6FOR.txt

```
TTGCTGCCTGCAGGTCGATCTAGTGGATCCGCCGCGACAGCGAACAGGCC
AGCCAGCTGGTGCAGTATCTTTCCACTTTTTTCCGCAAAAACTTAAAGCG
GCCTTCGGAGTTTGTTACTCTCGCCGACGAAATTGAACATGTGAATGCTT
ATCTGCAAATTGAAAAGGCGCGCTTCCAGTCGCGGTTGCAGGTCAACATT
GCTATTCCGCAAGAATTATCCCAGCAGCAATTGCCCGCGTTTACCCTGCA
ACCC
```

FIGURE 10

SUITE 71

```
TGCTGGTGGCGGGGATCTGACTGGAAATGGAAACGTTCTGTGGCAAAGAG
TGGGAATGTAGGAAGGGGGTGGGAGCATGCAGGGTTGGTGGAGCAGGGGG
TAGTGATCAGTGGTGAGGATTTGGTTTCTTGGTCTGAAATATGGATGGAA
GCTTTGTTGGGAGAGTGAATGACTTTTCAGTGAGGACAGGTGGATGCTTG
GGTGAATGCTTGGTAAGTTGTTGAACGCCTGGATAGTTGGATGGGTGGAC
ATGAACTTTGTATTACAGCTGCAGCTCCAGCACAGAAGGAACCGCCATCC
CAACCACGCCTGGGTGAGCTGACGGCCTCCCACGTCAGCCCCGACTCCGT
CCAGCTGGAATGGAGCGTCCCCGAGGGCTCCTTTGACTCCTTCACGGTGC
AGTACAAGGATGCACAAGGCCAGCCACAGGTGGTGCCCGTGGACGGTGGG
TTGCGCACAGTGACCGTGCCCGGGCTGTCGCCGTCCCGCCGCTACAAGTT
CAACCTGTATGGGGTGTGGGGGCGGAAGCGTCTGGGCCCCATGTCCACTG
ATGCTGTCACAGGTGAGCATGCTGTTGTGCTGCATCCATGTCTTTTGGCT
GACGGTTGTGTTGGCATATGGTAGGAACCTTTCAGGCCCACTCCTGGTTA
CTGTGGTCTTAATAGAGAGGGAAGTTCTTTCCTGTTCTTGACGTGGGTAG
CCTGGAGAGATGGGAGTATGGAAGATGAGAGGAAGAACGGAATAAGGAAT
GATTGATAATTATTGCAGAACGGATGGAAGGGAGGATGGATGGGCGGTGC
ATGGGTACATTGGTGCTTATAGCAGAGCTGGACGGCTGGTTGTACGTTGG
TTTGGTTGTTGAAGAGATGAAGAGTTGGATGGGCGTGTGCTTTCACTGTG
AATTCCTCCCCCTGTCTTGCAGCTCCGGCACAGAAGGAACCACCTTCCCA
GCCACTCTTGGGTGAGCTGACAGCGTCCCACGTCGGCCCCGACTCCGTCC
AGCTGGAATGGAGCGTCCCCGAGGGCTCCTTTGACTCCTTCACGGTGCAG
TACAAGGATGCACAAGGCCAGCCACAGGTGGTGCCCGTGGACGGTGGGTT
GCGCACAGTGACCGTGCCCGGGCTGTCGCCGTCCCGCCGCTACAAGTTCA
ACCTGTATGGGGTGTGGGGGCGGAAGCGTCTGGGCCCCATGTCCACTGAT
GCTGTCACAGGTGAGCATGCTGTGTTCTGCCTCCATGTTCTTTTGCTTTC
AGTGTAGTTGTCATGTGGCAGGAACCTTTCAGGGCCACTTTTGGTTAATG
TTGCCTTAATAGTCAAGGAAACAATTTGTTCTTGTTGAGTGGGAATGCCT
AACGGGATGGGAGTTTGGATGATGAGAGGACAAATCTTATAAGGATGAT
TGATAATTATTGCGGAACGGATGGAAGGAAGGTTGGATGGATGGAATGGT
GTTTGGATAAATTTGTGCTCAGAGCACAGCTGGAGTGTTGGATGAATGTT
GCTTTGCTTGTTGAATAGATGGATGTTTGGTTGTGTGGTTGCTTCCACTG
AGAATTCCTCCCTCTGTGCTGCAGCAGCAGCTCCAGCACAAGAGGAGCCA
CCTTCCCCACCACGTCTGGGTGAGCTGACAGCGTCCCATGTCGGCCCCGA
CTCCGTCCAGCTGGAATGGAGCGTCCCCGAGGGCTCCTTTGACTCCTTCA
CGGTGCAGTACAAGGATGCACAAGGCCAGCCACAGGTGGTGCCCGTGGAC
GGTGGGTTGCGCACAGTGACCGTGCCCGGGCTGTCGCCGTCCCGCCGCTA
CAAGTTCAACCTGTATGGGGTGTGGGGGCGGAAGCGTCTGGGCCCCATGT
CCACTGATGCTGTCACAGGTGAGGGCAGGAATTGGCACCTGTTGGGCTCT
GGGTTTGCAGCAGGTAGAAATGTAAACGTGGCCTGCGCTGGGGATCTTGT
TTTCCCCTGGCAATGGGAACAGCTGTTGGGTGCCTTTTTTGGGAAGGATC
CCTTAATCGCAGCATGAAGTATGAATGGACCAATTGGGTGTGGGTGGAGT
GATGGCTGTTGAGATGAGTTGGTGGCTGCTTGAGTAATTGTCTGTTGGAA
TGGATGGACAGATATGTGAAGGAGTGAAAGGATGGATAAAGTAATTTAGG
AATCGGTGGATGAAGAATGGGTAGGTAGACCCTTGGTGAAGTGGTAGAAT
GGAAGGATTTATGAACAGATATGAGTTAATTCTTGCATCGAAGTAGGTGT
AAGTGTCTATTAGCCTGTTGCACTGAACATGCAGTTGCATAGACAAATGA
GTGGGGAGAAGTACGGAGTAAATCCCTGCATGAATGGTAGGACAGAAACC
TGAATGCCTGGATGCTGGCAGTGTGAAGAATGGCACTTGGGATAGATGGT
TCGAGTATGGGGTAGATTAAAAGATGGATGGAAAAGAGGAACAGAGAGAG
GGTGATTGGATGAATGGATGGATGGTTGGATGTGACTGATTGACAGGTAC
CAAGCTTTTTTCCTGCACTGTGCCTTCTGTGCTGCAGCTGCAGAAGAGAC
GGAGGAGGAACCACCGTCCCAGCCACGCCTAGGAGAGCTGACGGCATCCC
ATGTCAGCCCCAACTCCGTCCAGCTGGAATGGAGCATCCCTGAGGGCTCC
TTTGACTCCTTCACGGTGCAGTACATAGACGTGCAAGGCCAGCCGCAGGA
GCTGCACTTGGATAGTGGGTCGCCCACAGTGACCGTGTCTGGTTTGCTGC
```

FIGURE 10

SUITE 72

Conti205.txt

```
CATCCCACCCCTACAAGTTCAACCTTTACGGGGTGTGGGGGCAGACACGT
CTGGGCCCCATCTCCACTGACACCATCACAGGTGAGGGCCCCTGCCTGCT
GCTGTGCTCTGGGCCTTGTGCTTGGCACGTGGCAGGAGCTGTGCGATGGG
CTGTGCTGGTGGCGGGGATCTGACTGGAAATGGAAACGTTCTGTGGCAAA
GAGTGGGAATGTAGGAAGGGGGTGGGAGCATGCAGGGTTGGTGGAGCAGG
GGGTAGTGATCAGTGGTGAGGATTTGGTTTCTTGGTCTGAAATATGGATG
GAAGCTTTGTTGGGAGAGTGAATGACTTTTCAGTGAGGACAGGTGGATGC
TTGGGTGAATGCTTGGTAAGTTGTTGAACGCCTGGATAGTTGGATGGGTG
GACATGAACTTTGTATTACAGCTGCAGCTCCAGCACAGAAGGAACCGCCA
TCCCAACCACGCCTGGGTGAGCTGACGGCCTCCCACGTCAGCCCCGACTC
CGTCCAGCTGGAATGGAGCGTCCCCGAGGGCTCCTTTGACTCCTTCACGG
TGCAGTACAAGGATGCACAAGGCCAGCCACAGGTGGTGCCCGTGGACGGT
GGGTTGCGCACAGTGACCGTGCCCGGGCTGTCGCCGTCCCGCCGCTACAA
GTTCAACCTGTATGGGGTGTGGGGGCGGAAGCGTCTGGGCCCCATGTCCA
CTGATGCTGTCACAGGTGAGCATGCTGTTGTGCTGCATCCATGTCTTTTG
GCTGACGGTTGTGTTGGCATATGGTAGGAACCTTTCAGGCCCACTCCTGG
TTACTGTGGTCTTAATAGAGAGGGAAGTTCTTTCCTGTTCTTGACGTGGG
TAGCCTGGAGAGATGGGAGTATGGAAGATGAGAGGAAGAACGGAATAAGG
AATGATTGATAATTATTGCAGAACGGATGGAAGGGAGGATGGATGGGCGG
TGCATGGGTACATTGGTGCTTATAGCAGAGCTGGACGGCTGGTTGTACGT
TGGTTTGGTTGTTGAAGAGATGAAGAGTTGGATGGGCGTGTGCTTTCACT
GTGAATTCCTCCCCCTGTCTTGCAGCTCCGGCACAGAAGGAACCACCTTC
CCAGCCACTCTTGGGTGAGCTGACAGCGTCCCACGTCGGCCCCGACTCCG
TCCAGCTGGAATGGAGCGTCCCCGAGGGCTCCTTTGACTCCTTCACGGTG
CAGTACAAGGATGCACAAGGCCAGCCACAGGTGGTGCCCGTGGACGGTGG
GTTGCGCACAGTGACCGTGCCCGGGCTGTCGCCGTCCCGCCGCTACAAGT
TCAACCTGTATGGGGTGTGGGGGCGGAAGCGTCTGGGCCCCATGTCCACT
GATGCTGTCACAGGTGAGGGCAGGAATTGGCACCTGGTGGGCTCTGGGTT
TGCAGCAGGTAGAAATGTAAACGTGGCCTGCGCTGGGGATCTTGTTTTCC
CCTGGCAATGGGAACAGCTGTTGGGTGCCTTTTTTGGGAAGGATCCCTTA
ATCGCAGCATGAAGTATGAATGGACCAATTGGGTGTGGGTGGAGTGATGG
CTGTTGAGATGAGTTGGTGGCTGCTTGAGTAATTGTCTGTTGGAATGGAT
GGACAGATATGTGAAGGAGTGAAAGGATGGATAAAGTAATTTAGGAATCG
GTGGATGAAGAATGGGTAGGTAGACCCTTGGTGAAGTGGTAGAATGGAAG
GATTTATGAACAGATATGAGTTAATTCTTGCATCGAAGTAGGTGTAAGTG
TCTATTAGCCTGTTGCACTGAACATGCAGTTGCATAGACAAATGAGTGGG
GAGAAGTACGGAGTAAATCCCTGCATGAATGGTAGGACAGAAACCTGAAT
GCCTGGATGCTGGCAGTGTGAAGAATGGCACTTGGGATAGATGGTTCGAG
TATGGGGTAGATTAAAAGATGGATGGAAAAGAGGAACAGAGAGAGGGTGA
TTGGATGAATGGATGGATGGTTGGATGTGACTGATTGACAGGTACCAAGC
TTTTTTCCTGCACTGTGCCTTCTGTGCTGCAGGACTATGGTCATAGCTGT
TTCCTGTGTGAAATTGTTATCCGCTCACAATTCCACACAACATCGA
```

FIGURE 10

SUITE 73

INTERNATIONAL SEARCH REPORT

International Application No
PCT/FR 98/02501

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GUILLEMOT F. ET AL.,: "Physical linkage of a guanine nucleotide-binding protein-related gene to the chicken major histocompatibility complex" PROC. NATL. ACAD. SCI. USA, vol. 86, - June 1989 pages 4594-4598, XP002074404 See the whole document , esp. discussion --- -/--	1

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
"&" document member of the same patent family

Date of the actual completion of the international search 20 April 1999	Date of mailing of the international search report 03/05/1999
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Müller, F

1

Form PCT/ISA/210 (second sheet) (July 1992)

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
X	GUILLEMOT F. ET AL.,: "A molecular map of the chicken major histocompatibility complex: the class II beta genes are closely linked to the class I genes and the nucleolar organizer" THE EMBO JOURNAL, vol. 7, no. 9, - 1988 pages 2775-2785, XP002074405 See the whole document , esp. figure 1 et page 2783, 2. colonne ---	1
Y	MILLER M. M. ET AL.,: "Regions of homology shared by Rftp-Y and major histocompatibility B complex genes" IMMUNOGENETICS, vol. 39, - 1994 pages 71-73, XP002074406 see the whole document ---	1-10
Y	WAKENELL P. S. ET AL.,: "Association between the Rfp-Y haplotype and the incidence of Marek's disease in chicken" IMMUNOGENETICS, vol. 44, - 1996 pages 242-245, XP002074407 see the whole document ---	1-10
X	BERNOT A. ET AL.,: "Linkage of a new member of the lectin supergene family to chicken MHC genes" IMMUNOGENETICS, vol. 39, - 1994 pages 221-229, XP002100550 See the whole document , esp. p.221, col. 1; p.222 col.1 ---	7-10
X	ZOOROB R. ET AL.,: "Chicken major histocompatibility complex class II B genes: analysis of interallelic and interlocus sequence variance" EUR. J. IMMUNOL., vol. 23, - 1993 pages 1139-1145, XP002074408 see the whole document ---	7-10
A	VALLEJO R.L. ET AL.,: "Non-association between Rfp-Y major histocompatibility complex-like genes and susceptibility to Marek's disease virus induced tumours in 6.3x7.2 intercross chickens" ANIMAL GENETICS, vol. 28, - 5 October 1997 pages 331-337, XP002074409 see the whole document --- -/--	

INTERNATIONAL SEARCH REPORT

International Application No
PCT/FR 98/02501

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
A	KAUFMAN J. ET AL.,: "Different features of the MHC class I heterodimer have evolved at different rates" J. IMMUNOLOGY, vol. 148, - 1 March 1992 pages 1532-1546, XP002074410 see the whole document -----	

1

RAPPORT DE RECHERCHE INTERNATIONALE

Deman internationale No
PCT/FR 98/02501

A. CLASSEMENT DE L'OBJET DE LA DEMANDE
CIB 6 C12Q1/68

Selon la classification internationale des brevets (CIB) ou à la fois selon la classification nationale et la CIB

B. DOMAINES SUR LESQUELS LA RECHERCHE A PORTE

Documentation minimale consultée (système de classification suivi des symboles de classement)
CIB 6 C12Q

Documentation consultée autre que la documentation minimale dans la mesure où ces documents relèvent des domaines sur lesquels a porté la recherche

Base de données électronique consultée au cours de la recherche internationale (nom de la base de données, et si réalisable, termes de recherche utilisés)

C. DOCUMENTS CONSIDERES COMME PERTINENTS

Catégorie °	Identification des documents cités, avec, le cas échéant, l'indication des passages pertinents	no. des revendications visées
X	GUILLEMOT F. ET AL.,: "Physical linkage of a guanine nucleotide-binding protein-related gene to the chicken major histocompatibility complex" PROC. NATL. ACAD. SCI. USA, vol. 86, - juin 1989 pages 4594-4598, XP002074404 le document en entier, esp. discussion --- -/--	1

☒ Voir la suite du cadre C pour la fin de la liste des documents

☐ Les documents de familles de brevets sont indiqués en annexe

° Catégories spéciales de documents cités:

"A" document définissant l'état général de la technique, non considéré comme particulièrement pertinent

"E" document antérieur, mais publié à la date de dépôt international ou après cette date

"L" document pouvant jeter un doute sur une revendication de priorité ou cité pour déterminer la date de publication d'une autre citation ou pour une raison spéciale (telle qu'indiquée)

"O" document se référant à une divulgation orale, à un usage, à une exposition ou tous autres moyens

"P" document publié avant la date de dépôt international, mais postérieurement à la date de priorité revendiquée

"T" document ultérieur publié après la date de dépôt international ou la date de priorité et n'appartenenant pas à l'état de la technique pertinent, mais cité pour comprendre le principe ou la théorie constituant la base de l'invention

"X" document particulièrement pertinent; l'inven tion revendiquée ne peut être considérée comme nouvelle ou comme impliquant une activité inventive par rapport au document considéré isolément

"Y" document particulièrement pertinent; l'inven tion revendiquée ne peut être considérée comme impliquant une activité inventive lorsque le document est associé à un ou plusieurs autres documents de même nature, cette combinaison étant évidente pour une personne du métier

"&" document qui fait partie de la même famille de brevets

Date à laquelle la recherche internationale a été effectivement achevée 20 avril 1999	Date d'expédition du présent rapport de recherche internationale 03/05/1999
Nom et adresse postale de l'administration chargée de la recherche internationale Office Européen des Brevets, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Fonctionnaire autorisé Müller, F

1

RAPPORT DE RECHERCHE INTERNATIONALE

Demande internationale No
PCT/FR 98/02501

C.(suite) DOCUMENTS CONSIDERES COMME PERTINENTS

Catégorie	Identification des documents cités, avec,le cas échéant, l'indicationdes passages pertinents	no. des revendications visées
X	GUILLEMOT F. ET AL.,: "A molecular map of the chicken major histocompatibility complex: the class II beta genes are closely linked to the class I genes and the nucleolar organizer" THE EMBO JOURNAL, vol. 7, no. 9, - 1988 pages 2775-2785, XP002074405 le document en entier, esp. figure 1 et page 2783, 2. colonne ---	1
Y	MILLER M. M. ET AL.,: "Regions of homology shared by Rftp-Y and major histocompatibility B complex genes" IMMUNOGENETICS, vol. 39, - 1994 pages 71-73, XP002074406 voir le document en entier ---	1-10
Y	WAKENELL P. S. ET AL.,: "Association between the Rfp-Y haplotype and the incidence of Marek's disease in chicken" IMMUNOGENETICS, vol. 44, - 1996 pages 242-245, XP002074407 voir le document en entier ---	1-10
X	BERNOT A. ET AL.,: "Linkage of a new member of the lectin supergene family to chicken MHC genes" IMMUNOGENETICS, vol. 39, - 1994 pages 221-229, XP002100550 voir le doc. en entier, esp. p.221, col. 1; p.222 col.1 ---	7-10
X	ZOOROB R. ET AL.,: "Chicken major histocompatibility complex class II B genes: analysis of interallelic and interlocus sequence variance" EUR. J. IMMUNOL., vol. 23, - 1993 pages 1139-1145, XP002074408 voir le document en entier ---	7-10
A	VALLEJO R.L. ET AL.,: "Non-association between Rfp-Y major histocompatibility complex-like genes and susceptibility to Marek's disease virus induced tumours in 6.3x7.2 intercross chickens" ANIMAL GENETICS, vol. 28, - 5 octobre 1997 pages 331-337, XP002074409 voir le document en entier --- -/--	

1

Formulaire PCT/ISA/210 (suite de la deuxième feuille) (juillet 1992)

RAPPORT DE RECHERCHE INTERNATIONALE

Demande internationale No
PCT/FR 98/02501

C.(suite) DOCUMENTS CONSIDERES COMME PERTINENTS

Catégorie °	Identification des documents cités, avec,le cas échéant, l'indicationdes passages pertinents	no. des revendications visées
A	KAUFMAN J. ET AL.: "Different features of the MHC class I heterodimer have evolved at different rates" J. IMMUNOLOGY, vol. 148, - 1 mars 1992 pages 1532-1546, XP002074410 voir le document en entier -----	

1